CHIP ENG SENG CONSTRUCTION PTE. LTD.

# Sustainability Report 2024

# Contents

# About This Report

This is the 2nd Annual Sustainability Report from Chip Eng Seng Construction Pte. Ltd. The report describes our sustainability performance on material environmental, social and governance ("**ESG**") topics. The report uses the following terms interchangeably to refer to Chip Eng Seng Construction Pte Ltd: "Chip Eng Seng Construction", the "Group" or the "Company".

The Company is a private limited company incorporated and domiciled in Singapore. The registered office and principal place of business of the Company is at 12 Tai Seng Link #08-01, Singapore 535233. The principal activity of the Company is investment holding. The Company's parent company Acrophyte Pte. Ltd. is incorporated and domiciled in Singapore.

**Reporting Period and Scope**
This report covers the period 1 January 2024 to 31 December 2024. The ESG data in this report covers the Company and its subsidiaries in all business spanning building construction, civil infrastructure, prefabrication technology, environmental & sustainability and procurement, except in GRC Buxton Pty Ltd. GRC Buxton Pty Ltd is in the process of building its ESG data gathering capability and the Group will include the relevant data in the next report.

It also excludes operations, joint ventures, partners and associates where the Company does not have management and or operational control, with exception of GHG emissions data. The Company reports emissions in accordance with the GHG Protocol Corporate Accounting and Reporting Standard ("GHG Protocol") using an equity share approach.

The subsidiaries included in this report are as follows:

| Held by the Company | Country of incorporation/ operations | Principal activities |
|---|---|---|
| Chip Eng Seng Contractors (1988) Pte Ltd | Singapore | General building contractor |
| CES Engineering & Construction Pte. Ltd. | Singapore | General building contractor |
| CES Building and Construction Pte. Ltd. | Singapore | General building and related services |
| CES-Precast Pte. Ltd. | Singapore | Manufacturing and trading of precast products |
| CES_INNOFAB Pte. Ltd. | Singapore | Modular building construction (3D printing) |
| CES_SDC Pte. Ltd. | Singapore | Building construction and construction project management |
| CES_Salcon Pte. Ltd. | Singapore | Construction and supply of equipment for water and wastewater treatment plant |
| CES ECO Solutions Pte. Ltd. | Singapore | Engineering design and consultancy services in energy management and clean energy systems |
| Eura Construction Supply Pte. Ltd. | Singapore | Trading of construction materials and engineering parts |
| GRC Pacific Pte. Ltd. | Singapore | Investment holding |

| Held by subsidiaries | Country of incorporation/ operations | Principal activities |
|---|---|---|
| CES-Precast Sdn. Bhd. | Malaysia | Manufacturing of precast concrete components |
| CES_Lodge Pte. Ltd. | Singapore | Acquisition of portable containers/structure to rent out as workers' dormitory and provision of related services |
| CESI (Myanmar) Company Limited | Myanmar | General building contractor and project management |
| CES-Salcon Technologies Pte. Ltd. (f.k.a H+E Technologies Pte. Ltd.) | Singapore | Process and industrial plant engineering design and consultancy services |
| CES_Salcon Sdn. Bhd. | Malaysia | Construction and supply of equipment for water and wastewater treatment plant |

| Held by subsidiaries | Country of incorporation/ operations | Principal activities |
|---|---|---|
| PT CES_Salcon International | Indonesia | Construction and supply of equipment for water and wastewater treatment plant |
| Genswitch Solutions Private Limited | Singapore | Provision of electrical goods and services |
| GRC Holdings (Australia) Pty Ltd | Australia | Investment holding |
| GRC Builders (AUS) Pty Ltd | Australia | Investment holding |
| GRC Buxton Pty Ltd | Australia | General building contractor |

**Reporting Standards**

This report has been prepared in accordance with the Global Reporting Initiative ("GRI") Standards. We have used the latest GRI standards – the GRI Standards 2021. We continue to follow the GRI Standards, the most widely used global sustainability reporting standards, due to their longstanding universal acceptability, which allows for comparability of our performance. This report is also prepared in accordance with the Listing Rules of the Singapore Exchange Securities Trading Limited (Rules 711A and 711B). The report also covers the Common Set of Core Metrics recommended by SGX.

We have continued to align our report with selected metrics from the Sustainability Accounting Standards Board's ("SASB") Engineering & Construction Services Sustainability Accounting Standard to include financially material sustainability topics. We have referred to the Task Force on Climate-Related Disclosures ("TCFD") recommendations to report how we address our climate-related risks and opportunities.

| Reporting Standards and Frameworks |
|---|
| GRI Standards 2021 |
| SASB Standards (Engineering & Construction Services) |
| SGX Sustainability Reporting Guide |
| TCFD Recommendations |
| GHG Protocol Corporate Accounting and Reporting Standard |
| United Nations Sustainable Development Goals ("UN SDGs") |

We have integrated the United Nations Sustainable Development Goals into our sustainability reporting to demonstrate how our actions contribute to these important global goals. We have used the GHG Protocol Corporate Accounting and Reporting Standard to calculate our carbon emissions. We have reported our Scope 2 emissions using the location-based method as the market-based method does not apply to our operations.

**Reporting Principles**

We have applied the eight reporting principles outlined in the GRI Standards 2021 (GRI 1: Foundation 2021) to develop this report. We follow GRI's eight reporting principles of accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness and verifiability to ensure high-quality report content. The ESG data provided in this report has been primarily extracted from internal information systems and primary records to ensure accuracy and consistency. Financial figures are in Singapore dollars unless specified otherwise.

**Restatements**

Certain prior years' figures have been restated in this report to reflect new and /or revised factors used in computations and also to include data not captured or recorded in prior years' for better comparison with 2023 and 2022 disclosures.

**Assurance**

Data presented in this report has been internally verified for completeness and accuracy. The report has undergone an internal review process by our internal audit function, overseen by the Board of Director. We did not seek external assurance for this report which remains under consideration for future reports.

**Availability**

This report can be downloaded in PDF format from our website: https://www.chipengseng.com.sg/investor-relations/sustainability/

**Feedback**

We value feedback on this report and welcome stakeholder comments or questions at: sustainability@chipengseng.com.sg.

# Awards and Recognitions

The numerous awards and recognitions from Workplace Safety and Health Council ("WSHC'), The Singapore Contractors Association Limited ("SCAL") and Housing Development Board ("HDB") which the Group gained over the years demonstrates our total commitment to issues such as safety, quality, and sustainable development.

Listed below are the honours we received in the last three years.

| 2024 | Description |
|---|---|
| Silver | **WSHC Workplace Safety and Health Performance Award 2024 (Silver)**<br>Chip Eng Seng Contractors (1988) Pte Ltd |
| Winner | **SCAL Workplace Safety & Health Innovation Awards 2024**<br>Chip Eng Seng Contractors (1988) Pte Ltd (Canopy Holder) |
| Award | **WSHC WSH Innovation Award 2024**<br>Chip Eng Seng Contractors (1988) Pte Ltd (Precast Window Façade Canopy Holder) |
| Award | **WSHC bizSAFE Partner Award 2024**<br>Chip Eng Seng Contractors (1988) Pte Ltd |
| SHARP Award | **WSHC Safety and Health Award Recognition for Projects 2024**<br>Chip Eng Seng Contractors (1988) Pte Ltd (N8C21 - Tampines GreenSpring)<br>Chip Eng Seng Contractors (1988) Pte Ltd (Pasir Ris N5C26/27 - Costa Grove)<br>CES Engineering & Construction Pte. Ltd. (Hougang N2C11 – Kovan Wellspring)<br>CES_SDC Pte. Ltd. (C4A – Biosolids and Digester TWRP) |
| Merit | **HDB Certificate of Merit (Construction) Award 2024**<br>Chip Eng Seng Contractors (1988) Pte Ltd (Tampines GreenSpring) |
| Winner | **HDB Construction Safety Award 2024**<br>Chip Eng Seng Contractors (1988) Pte Ltd (Tampines N8C31)<br>Chip Eng Seng Contractors (1988) Pte Ltd (Sengkang N4C39 & 40) |
| Certificate of Recognition | **HDB Construction Resilience Recognition Award 2024**<br>CES Engineering & Construction Pte. Ltd. (Marsiling Grove) |

| 2023 | Description |
|---|---|
| Silver | **WSHC Workplace Safety and Health Performance Award 2023 (Silver)**<br>CES_SDC Pte. Ltd. |
| Certificate of Participation | **SCAL Productivity & Innovation Awards (PIA) 2023**<br>Chip Eng Seng Contractors (1988) Pte Ltd (H-Bracket) |
| SHARP Award | **WSHC Safety and Health Award Recognition for Projects 2023**<br>Chip Eng Seng Contractors (1988) Pte Ltd (Sengkang N4C39/C40 - Fernvale Dew)<br>Chip Eng Seng Contractors (1988) Pte Ltd (Tampines N8C31 – Tampines Green Grove)<br>Chip Eng Seng Contractors (1988) Pte Ltd (Pasir Ris N5C26/C27 – Costa Grove)<br>CES_SDC Pte. Ltd. (TWRP Contract C4A – Biosolids and Digester)<br>CES_SDC Pte. Ltd. (Jurong Regional Line J107) |
| Award | **WSHC bizSAFE Partner Award 2023**<br>CES_SDC Pte. Ltd.<br>Chip Eng Seng Contractors (1988) Pte Ltd |
| Award | **HDB Construction Award 2023**<br>CES Engineering & Construction Pte. Ltd. |
| Award | **HDB Construction Safety Award 2023**<br>Chip Eng Seng Contractors (1988) Pte. Ltd. (Bidadari C8 & C9) |

| 2022 | Description |
|---|---|
| Silver | **WSHC Workplace Safety and Health Performance Award 2022 (Silver)**<br>CES_SDC Pte. Ltd.<br>Chip Eng Seng Contractors (1988) Pte Ltd |

| 2022 | Description |
|---|---|
| Certificate of Merit | **SCAL Workplace Safety & Health Innovation Awards 2022**<br>Chip Eng Seng Contractors (1988) Pte Ltd (Sengkang C39/C40 - Fernvale Dew) |
| SHARP Award | **WSHC Safety and Health Award Recognition for Projects 2022**<br>Chip Eng Seng Contractors (1988) Pte Ltd (Sengkang N4C39 - Fernvale Dew)<br>Chip Eng Seng Contractors (1988) Pte Ltd (Sengkang N4C40 - Fernvale Dew)<br>Chip Eng Seng Contractors (1988) Pte Ltd (Bidadari C8/C9 - Woodleigh Glen)<br>Chip Eng Seng Contractors (1988) Pte Ltd (Woodlands N1C25 - Marsiling Grove)<br>CES_SDC Pte. Ltd. (Jurong Regional Line J107) |
| Certification of Commendation | **WSHC Safety and Health Award Recognition for Projects 2022**<br>Chip Eng Seng Contractors (1988) Pte Ltd (Tampines Green Spring – Tampines N8C31)<br>Chip Eng Seng Contractors (1988) Pte Ltd (Costa Grove – Pasir Ris N5C26/27) |
| Award | **WSHC bizSAFE Partner Award 2022**<br>CES_SDC Pte. Ltd.<br>Chip Eng Seng Contractors (1988) Pte Ltd |
| Award | **HDB Construction Safety Award 2022**<br>CES Engineering & Construction Pte. Ltd. (Bidadari C6/C7) |
| Award | **HDB Construction Award 2022**<br>CES Engineering & Construction Pte. Ltd. (Design & Build of Upgrading Project – G27A) |

Please visit our website https://www.chipengseng.com.sg/corporate/recent-awards/ to see the complete listing of our awards and commendations since 2010.

# Major Active Projects

Below are our major active projects in the reporting period.

| | Project | Description |
|---|---|---|
| 1. | Tengah Brickland Contract 2 | Building works at Tengah Brickland and Common Green |
| 2. | Ulu Pandan Contract 1, Contract 2 & Park | Building works at Ulu Pandan Contract 1, Contract 2 and Park |
| 3. | Pasir Ris Neighbourhood 5 Contract 26 & 27 | Building construction of 10 blocks, with a single storey car park, single-storey commercial facilities, 2 precinct pavilions, 3 electrical substations and communal facilities |
| 4. | Hougang Neighbourhood 2 Contract 11 | Construction of 1 block of 13/15-storey, 1 block of 16/18-storey and 2 blocks of 18-storey residential building with multi-storey carpark, ESS & roof garden, precinct pavilion, community facilities and park, and 1 block of 4-storey community |
| 5. | Design & Build of Upgrading Projects for G29G | Upgrading projects for 2 precincts at Serangoon Ave 1, 1 precinct at Lengkong Tiga and 1 precinct at Ubi Ave 1 |
| 6. | Contract J107 | Design and construction of Gek Poh Station, Tawas station and viaduct for Jurong Region Line |
| 7. | Tuas Water Reclamation Plant Contract 4A – Biosolids and Digesters | Construction of biosolids treatment (Part 1) and biogas handling facilities (Part 2) |
| 8. | Contract CCKWW | Contract 1 - Civil and external sewer works for reconstruction of Choa Chu Kang Waterworks (Part I: Construction Works and Part II: Post Construction Environmental Monitoring Services) |
| 9. | Tuas Water Reclamation Plant, Contract 4B | Design and construction of Digestion Pre-treatment and Sidestream Nitrogen Removal Facilities, including operations and maintenance services |
| 10. | Contract P102 | Design and construction of Elias Station and tunnels for Cross Island Line - Punggol Extension |
| 11. | Contract C6A | Construction of Tuas Water Reclamation Plant Contract 6A – Administration and Operation Buildings and two (2) years' maintenance service |
| 12. | Intel Pelican Industrial Wastewater Plant | Supply, installation, testing and commissioning of wastewater treatment systems |
| 13. | 8 Egan Street | Construction of a social housing development consisting of three (3) levels of basement and nine (9) levels of apartments. |

# Governance

**Board Statement**

The Board of Directors (the "Board") remains committed to sustainability, good governance and risk management. The Board is also committed to setting strategic objectives with an appropriate focus on sustainability. The Board regularly evaluates potential sustainability risks, including climate-related risks and opportunities, as part of the overall risk assessment and provides strategic direction to the management to adopt relevant policies and responses. The Board determines, reviews and approves the material ESG factors and metrics for sustainability reporting, and provides oversight of the management and monitoring of these material ESG factors through regular reviews of performance indicators, targets and progress.

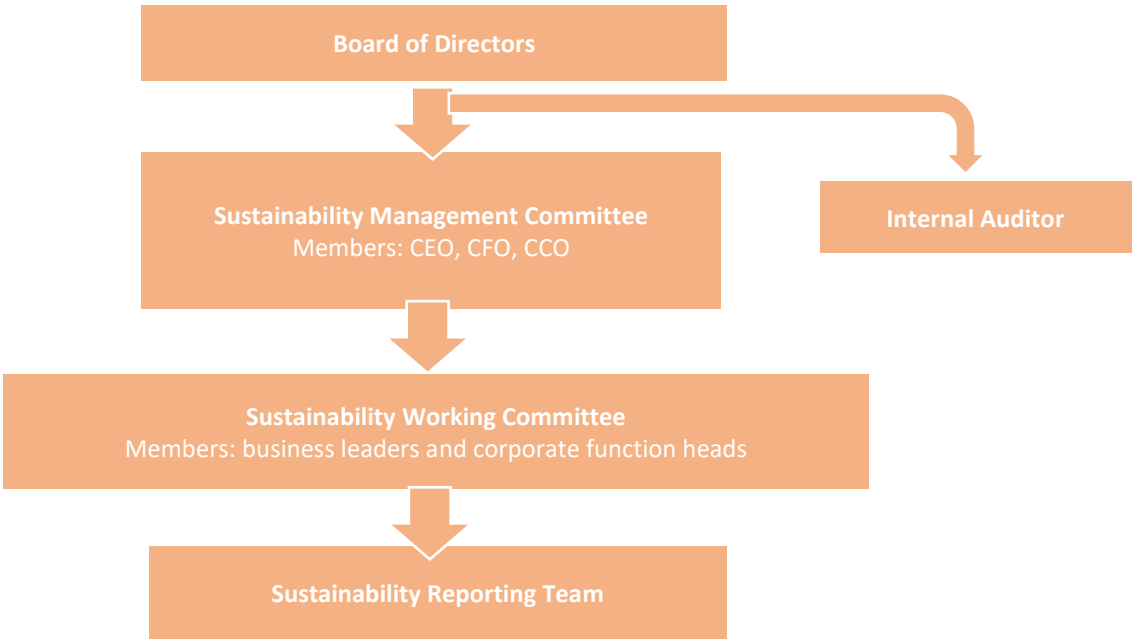
**Sustainability Governance**

Guided by the Board, the Group's Sustainability Management Committee ("SMC") comprises of CEO, CFO and CCO. The SMC supervises the development, adoption and implementation of sustainability strategies and policies, including climate-related issues. The SMC also provides regular updates on sustainability progress to the Board.

The SMC is supported by a Sustainability Working Committee comprises of senior business leaders and corporate function heads. The business leaders are responsible for sustainability initiative, execution of policies, monitoring and reporting of performance. A sustainability report executive is responsible for coordinating the sustainability reporting process, engaging with internal stakeholders to prepare the Group's sustainability report, and providing regular updates to the SMC and the Board.

A cross-functional sustainability reporting team assists the sustainability report executive in sustainability reporting by collecting and validating the sustainability performance data.

The Internal Auditor reports to the Board and is responsible for providing independent assurance on the sustainability report, ESG-related and climate-related risk and opportunity.



**Corporate Governance and Ethics**

Chip Eng Seng Construction is committed to upholding high corporate governance standards. The Group believes that good corporate governance provides the framework for an ethical and accountable corporate environment, which is essential to the long-term sustainability of the Group's businesses and performance and the protection of shareholders' interests.

Please refer to the Corporate Governance Report section of Chip Eng Seng Corporation Ltd Annual Report 2021 for more information.

**Anti-Corruption**

Preventing corruption is critical for our corporate reputation. Chip Eng Seng Construction maintains a zero-tolerance approach to all forms of corruption, including bribery, extortion, fraud and money laundering. Our Anti-Bribery and Corruption Policy prohibits dishonest and fraudulent behaviour, which includes offering, promising, authorising, providing or receiving any kickback or any gratification as an inducement to do a favour with corrupt intent. We require all employees to comply with all applicable local anti-bribery laws where the Group operates. For example, our policy requires compliance with the Singapore Prevention of Corruption Act, the UK Bribery Act, the US Foreign Corrupt Practices Act, the Australian Criminal Code Act and other similar anti-bribery laws where the group does business. All new employees are asked to submit a conflict-of-interest declaration form upon joining and re-submit annually. Employees who participate in any tendering process or awarding of contracts are required to submit a positive declaration of any conflict of interest, such as a 'nil' declaration.

All new employees or joiners are briefed on our Anti Bribery and Corruption policy during orientation by human resource department.

There were no confirmed cases of corruption in the reported period.

**Anti-Competition**

Fair business practices that facilitate healthy competition are important for the efficient functioning of markets. Anti-competitive behaviour can attract legal action and result in financial and reputational loss. The Group is committed to complying with applicable competition and anti-trust laws where it operates. In Singapore, our policies are guided by the Competition Act.

No legal actions were pending or concluded against the Group in the reported period.

**Tax Compliance**

The Group's strategy and approach to tax is to fully adhere to relevant tax law and regulations in all countries we do business. Tax payment indirectly support local governments in their economic, environmental and social development. The Group has zero tolerance for any intentional breach of tax laws and regulations.

Finance team is kept abreast of new tax change by group tax agent or through updates from tax authorities. Finance team has access to tax agent or consultant to clarify new tax regulations and workshop is conducted, where necessary.

Our tax paid is primarily in Singapore. Please refer to page 49 for details on tax amount paid.

**Human Rights**

The Group is committed to upholding nationally and internationally recognised human rights in its operations. We respect the human rights of our workers, contractors and sub-contractors, and the wider communities in which we operate.

Our corporate policy prohibits discrimination, child labour and forced labour in our operations and in work performed by contractors and sub-contractors. Our policy covers:

a) Non-discrimination: We prohibit discrimination in employment on any grounds, including gender, age, race, ethnicity, religion, marital status, pregnancy and disability;
b) Child Labour: We prohibit child labour in our operations and expect our suppliers to ensure the same standards;

c) Forced Labour: We prohibit forced labour in our operations and expect our suppliers to ensure the same standards; and
d) Freedom of Association and Right to Collective Bargaining: We respect our employees' right to freedom of association and collective bargaining under local laws. Our employees can freely raise any matter of concern with their supervisors, the HR department, or senior management.

Our subsidiary CES_SDC Pte. Ltd. has a collective bargaining agreement with the Building Construction and Timber Industries Employees' Union, where insignificant percentage the employees are union members.

Due to strict human resources policies, we have determined that the risk of child labour and forced labour is negligible in our operations. There were no non-compliance incidents relating to child labour, forced labour, discrimination and freedom of association in our operations during the reported period.

**Data Privacy**
The Group is committed to safeguarding personal data, including customers' and employees' personal information. Our policies and measures to manage personal data comply with Singapore's Personal Data Protection Act ("PDPA") and local regulations in other markets where we operate.

Periodically, the Group send its employees to training workshop on PDPA to refresh and update the best practices. These employees help to ensure effective implementation of our data protection policies and practices in their departments.

There were no confirmed cases concerning breach of customer privacy or loss of customer data.

**Regulatory Compliance**
Compliance with applicable laws wherever we operate is crucial for our reputation and stakeholder trust. Non-compliance may result in penalties or stop-work orders, ultimately affecting the Group's finances, but more than that, non-compliance damages a company's reputation. Complying with all applicable economic, environmental, labour and social laws is an essential component of our governance and ethics. As a diverse, international business, ensuring legal compliance where we operate is crucial for maintaining stakeholders' trust. Our business leaders and function heads regularly reviews applicable labour, environmental, health and safety and economic regulations, including emerging laws in relevant jurisdictions, to ensure compliance. We circulate the necessary regulatory updates to the relevant employees to help them stay up to date with legal requirements.

In 2024, there was one (1) significant offence with regulatory law. We consider an offence as significant when a fine is $100,000 and more or when there a stop-work-order of 7 days and more. In this incident, authority issued a stop work order at a construction project site due to vector issue.

Total fine and penalty paid during the year was $38,700 compared with $72,852 in year 2023.

**Whistleblowing Policy**
As part of good governance, providing a safe avenue for employees and external stakeholders to raise concerns about our operations is important. Therefore, the Group has implemented a whistle-blowing policy and procedures to enable employees and external parties to raise concerns about possible improprieties in matters of financial reporting or other ethical matters, including corruption. The C-Suite and top executive periodically review the adequacy of the whistleblowing measures. The policy is communicated to employees through the Staff Handbook, is also available on the Company's corporate website. To promote further awareness, the whistle-blowing policy is covered during staff training and periodic employee communication.

Please refer to our Company website for more information about our whistle-blowing policy.

**Certifications**

Adhering to national and international standards such as the International Organisation for Standardization ("ISO"), Building Control Authority ("BCA") and Singapore Concrete Institute ("SCI") are important to ensure high quality management across our operations. The Group adopt relevant standards to promote governance, quality, safety and environmental management.

Certifications obtained by our group at various business segments are listed below.

| Business Segment/ Entity | Certification and Award | Date of Issue | Expiry Date |
|---|---|---|---|
| **Building Construction** | ISO 9001:2015 | 16-06-2023 | 08-06-2026 |
| • Chip Eng Seng Contractors (1988) Pte Ltd | ISO 14001:2015 | | |
| | ISO 45001:2018 | | |
| | WSHC bizSAFE Star | 21-07-2023 | 08-06-2026 |
| | WSHC bizSAFE Partner | 10-01-2023 | 08-01-2025 |
| | BCA Green and Gracious Builder Award (Excellent) | 05-06-2023 | 09-06-2026 |
| • CES Engineering & Construction Pte. Ltd. | ISO 9001:2015 | 16-06-2023 | 08-06-2026 |
| | ISO 14001:2015 | | |
| | ISO 45001:2018 | | |
| | WSHC bizSAFE Star | 24-07-2023 | 08-06-2026 |
| | WSHC bizSAFE Partner | 09-06-2023 | 08-06-2025 |
| | BCA Green and Gracious Builder Award (Excellent) | 05-06-2023 | 09-06-2026 |
| • CES Building and Construction Pte. Ltd. | WSHC bizSAFE level 3 | 16-01-2024 | 15-01-2027 |
| **Building Construction - Australia** | AS/NZS ISO 9001 - 2016 | 16-12-2024 | 10-12-2027 |
| • GRC Buxton Pty Ltd | AS/NZS ISO 14001 - 2016 | 16-12-2024 | 10-12-2027 |
| | AS/NZS ISO 45001 - 2018 | 16-12-2024 | 10-12-2027 |
| **Civil Infrastructure** | ISO 9001:2015 | 15-12-2023 | 22-12-2026 |
| • CES_SDC Pte. Ltd. | ISO 14001:2015 | | |
| | ISO 45001:2018 | | |
| | WSHC bizSAFE Star | 02-01-2024 | 01-01-2027 |
| | WSHC bizSAFE Partner | 22-08-2024 | 21-08-2026 |
| | BCA Green and Gracious Builder Award (Star) | 04-10-2023 | 09-10-2026 |
| **Prefabrication Technology** | ISO 9001:2015 | 09-11-2022 | 08-12-2025 |
| • CES-Precast Pte. Ltd. | ISO 45001:2018 | 09-11-2022 | 28-11-2025 |
| | WSHC bizSAFE Star | 15-11-2022 | 28-11-2025 |
| | SCI Precaster Accreditation Scheme (81400 Senai, Johor) | 27-02-2016 | 27-02-2025 |
| | SCI Precast Accreditation Scheme (65 Tech Park Crescent) | 08-10-2020 | 08-10-2025 |
| | SCI Precaster Acreditation Scheme (86200 Simpang Renggam, Johor) | 19-08-2022 | 19-08-2025 |
| | SCI PBU Manufacturer Accreditation Scheme (Tuas South Way) | 09-02-2024 | 09-02-2025 |
| | SCI PBU Manufacturer Accreditation Scheme (Pasir Ris Planning Area) | 26-03-2024 | 26-03-2025 |
| • CES-Precast Sdn. Bhd. | Singapore Green Building Product (SGBP) Certification (√√√√ Leader) – Ready-Mixed Concrete | 20-07-2024 | 10-06-2025 |

| Business Segment/ Entity | Certification and Award | Date of Issue | Expiry Date |
|---|---|---|---|
| • CES_INNOFAB Pte. Ltd. | ISO 9001:2015<br>ISO 14001: 2015<br>ISO 45001:2018 | 05-12-2022 | 04-12-2025 |
| | WSHC bizSAFE Star | 20-03-2023 | 04-12-2025 |
| **Environmental & Sustainability**<br>• CES_Salcon Pte. Ltd. | ISO 9001:2015 | 12-06-2024 | 05-07-2027 |
| | ISO 14001:2015 | | |
| | ISO 45001:2018 | | |
| | WSHC bizSAFE Star | 14-06-2024 | 05-07-2027 |

# Sustainability Approach

**Ensuring sustainable business growth and creating long-term value for our stakeholders.**

Our Group's vision is to improve lives by delivering value for living and work, and our mission is to invest strategically and sustainably to make a difference for all stakeholders. Our approach is to incorporate specific and manageable sustainability targets into our core business strategies to ensure sustainable business growth, and long-term value creation for our stakeholders.

From a humble beginning in the 1960s as a building sub-contractor for landed properties, Chip Eng Seng Construction Group has grown into a diverse multinational operation with businesses spanning building construction, civil infrastructure engineering, prefabrication technology, environmental & sustainability engineering and procurement of construction materials. Our commitment to integrity, ethics, and responsible business has been at the centre of our growth story.

With the Group's expansion into new business segments, we have continued to pursue excellence and sustainable growth. The numerous awards we have won across our businesses are testimony to our dedication to excellence. Our building construction business, the oldest business in the Group, has constantly bagged national awards for workplace safety and health, construction quality, environment, productivity and innovation, including the Building and Construction Authority ("BCA") Green and Gracious Builder Award.

Keeping pace with stakeholders' expectations and our long-held corporate values, we remain unwavering in managing our business activities' material environmental, social, and economic impacts to maximise our stakeholders' value.

As we emerge from the COVID-19 pandemic and learn to live alongside the virus, we continue to adapt and develop approaches to our business that are fit for the present and the future. We are using that same adaptability to address the increasing sense of urgency surrounding climate change risk and climate action. For our part, we will continue to invest in lower-carbon alternatives and technologies while increasing our renewable energy adoption in order to reduce greenhouse gas emissions across our businesses.

As the buildings sector recognises the need to decarbonise in line with the Paris Agreement, we continue to explore new options with our supply chain partners, including alternative materials that are more energy efficient or have lower greenhouse gas emissions and environmental footprint.

The Group remains committed to sustainable development. Our support for the UN SDGs that aim to build resilient, just and sustainable societies continues through a host of sustainability measures our businesses are adopting. Our contribution to the SDGs is highlighted throughout this report.

**Sustainability Targets**

Setting targets is imperative for monitoring and achieving progress on sustainability actions. Therefore, we have established targets for our material ESG topics at our significant business segments and corporate function, which we monitor, review, and report on to demonstrate our sustainability performance and progress. This report covers detailed disclosures about our performance against key performance indicators and targets.

Below describe our business segments and corporate function.

**Building Construction**

From our humble beginnings as a sub-contractor in the 1960s, the Group has grown to become a reputed main contractor for public and private sector projects today. Our commitment to green construction is a core aspect of our sustainability approach. We continue to apply green building standards, principles and technologies in our projects. We strive to use environmentally sustainable materials certified under the Singapore Green Labelling Scheme, and all of our sub-contractors and suppliers are required to meet the green product specifications before being invited for tender or supply. Learn more about our building construction business at https://www.chipengseng.com.sg/ building-construction/.

**Building Construction in Australia**

In January 2024, the Group entered into a joint venture with three (3) Australian joint venture partners through GRC Buxton Pty Ltd for its maiden building construction venture into Victoria, Australia, which focuses primarily on private residential projects, community housing and aged care & education facilities. Australia offers a unique landscape of opportunities which aligns with the Group's strategy to showcase its building construction capabilities, experiences and robust procurement links in Asia, outside of Singapore. Learn more about our building construction in Australia at https://www.grcbuxton.au/.

**Civil Infrastructure**

In 2019, the Group extended its building construction business into civil infrastructure engineering, with the acquisition of CES_SDC Pte. Ltd. (formerly known as Sembcorp Design and Construction Pte. Ltd.). With an established track record in civil, industrial and utility infrastructure projects, CES_SDC offers a wide spectrum of engineering and construction services from tunnel boring to modular construction, and is capable of providing customised solutions. We are committed to embedding our green design and construction expertise into the infrastructure projects we design and build. We are engaged in several infrastructure projects which are essential for socioeconomic development and environmental sustainability and play an important role in national development. Learn more about our infrastructure and civil engineering business at https://www.chipengseng.com.sg/ business/civil-infrastructure/.

**Prefabrication Technology**

The Group has been in the precast concrete works technology business since 2003. In 2006, the Group incorporated a wholly-owned subsidiary, CES-Precast Pte. Ltd, to further extend its precast concrete works business with prefabricated prefinished volumetric construction (“PPVC”) businesses to meet Singapore’s growing demand for precast and PPVC components. Our precast concrete and PPVC concrete materials, used for residential, commercial, industrial and infrastructure projects, enhance productivity and safety. In 2022, CES-Precast was awarded the Singapore Green Building Product (“SGBP”) certification for its work on supplementary cement replacement. Learn more about our precast technology business at https://www.chipengseng.com.sg/business/precast-technology/.

To further enhance our capability, in 2016, the Group collaborated with Nanyang Technological University, through CES_SDC, to conduct targeted research on 3D printing technology and materials. This transformational technology is aimed at improving productivity in the construction industry. Over the years, the research collaboration has yielded novel materials and methodologies that can synergistically integrate with the construction value chain.

In 2021, CES_INNOVFAB Pte. Ltd. was established to spearhead further development and production of concrete 3D printed Prefabricated Bathroom Units (“PBUs”) and other innovative lightweight concrete-based 3D printed products to complement the Group’s construction business. Our innovative production method for PBUs does not require moulds compared to conventional concrete PBUs, resulting in reduced material wastage. Our 3D printing technology capabilities can be deployed for both on-site construction and off-site prefabrication. Furthermore, our products are manufactured using green cement, which comprises residual materials from other industries that are upcycled, thereby reducing the overall carbon footprint.

**Environmental & Sustainability**

In 2021, the Group forayed into water and environmental engineering business after acquiring wholly-owned subsidiary, Boustead Salcon Water Solutions Pte. Ltd. from Boustead Singapore Ltd. The rebranded entity, CES_Salcon Pte. Ltd. ("CES_Salcon"), helps the Group in extending its existing civil infrastructure engineering business footprint to include the design, engineering, supply and commissioning of water and wastewater treatment technologies and solutions. CES_Salcon started in 1980 as a trading company and steadily grew into a multi-disciplinary Engineering Procurement Construction in water and wastewater technology with installations in more than 80 countries, spanning various industries from the oil and gas, petrochemical, power to the semiconductor and municipal sectors.

In Singapore, water scarcity is an existential matter, and this has spurred us towards finding unique solutions in sustainable water management by reducing, reusing or recycling water. It initially requires system optimisation to reduce discharge, followed by process adaption to reuse the water and subsequently reclamation to recycle the wastewater. CES_Salcon has a successful track record of reclaiming some of the most severe wastewater in the tannery, textile, pulp and paper industry for the past 20 years, coupled with a few zero liquid discharge projects. We are also committed to partnering with the plant's owner to reduce the plant's carbon footprint that the company is contracted to maintain. Learn more about our environmental business at https://www.chipengseng.com.sg/environmental/.

**Procurement**

The Group through its subsidiary Eura Construction Supply Pte. Ltd ("Eura") which is an Approved Material Suppliers of floor/wall titles for HDB projects provides procurement services relating to construction-related supplies and materials and related services. While, Genswitch Solutions Pte Ltd. 51% held by Eura provides electrical goods and services.

**Corporate Function**

Our group has a centralised business support functions which consist of finance department, administration, human resource & payroll, information technology & digitalisation, corporate communications and workplace health & safety department.

# Stakeholders

**Trust from our stakeholders form the foundation of all of our business activities.**

Forging trusted relationships with our wide range of stakeholders, understanding their needs, and the potential impact they can have on our business is crucial for long-term sustainable growth.

We identify our stakeholders based on the extent to which they are affected by our business activities or their ability to influence our business goals. A good understanding of our stakeholders' views and opinions form an essential part of our business strategy. Although we did not directly engage any external group to prepare this report, insights gained from our ongoing engagement with various stakeholders has helped us determine our material ESG topics for reporting.

A summary of our stakeholder engagement is in the following table.

| Stakeholder Groups | Topics and Concerns | Engagement Methods |
|---|---|---|
| Customers (Developers, municipalities, contractors, utility and infrastructure owner/operators) | • Good workmanship<br>• Value engineering and design<br>• Timely completion of projects<br>• Productivity and innovation<br>• Prompt rectification<br>• Clear communication<br>• Legal and contractual compliance<br>• Public and worker safety | • Regular project updates<br>• Contract agreements<br>• Customer service<br>• Submission of performance survey reports<br>• Website |
| Employees | • Safety, health and wellbeing<br>• Training and development<br>• Job security<br>• Career advancement<br>• Fair remuneration and rewards<br>• Employee welfare<br>• Work-life balance | • Regular meetings<br>• Internal communication<br>• Training opportunities<br>• Performance reviews |
| Government agencies and regulators | • Climate change<br>• Regulatory compliance<br>• Responsible business practices<br>• Productivity and innovation<br>• Sustainability reporting | • Compliance updates<br>• Timely data reporting and surveys<br>• Participating in stakeholder consultations by government agencies<br>• Participating in government committees<br>• Sustainability reports |
| Investors and shareholders | • Financial performance<br>• Return on investment<br>• Governance<br>• Risk management<br>• ESG performance<br>• Sustainable business growth<br>• Business diversification | • Annual general meetings/Extraordinary general meeting<br>• Annual reports<br>• Sustainability reports<br>• Shareholder circulars |
| Suppliers and sub-contractors | • Clear specifications and instructions<br>• Workplace safety and health<br>• Timely payment according to contractual terms<br>• Technical guidance | • Supplier policies and requirements<br>• Tenders / Request for Proposal Agreements<br>• Product presentations and seminars<br>• Site inspections |

| Stakeholder Groups | Topics and Concerns | Engagement Methods |
|---|---|---|
| | • Timely provision of materials and equipment<br>• Productivity and innovation<br>• Site inspections | |
| Community | • Minimal disruptions due to the Group's project work<br>• Minimal dust, noise and vibrations from construction<br>• Health and safety<br>• Support for community programmes | • Advance notification of work schedule<br>• Feedback systems in place<br>• Regular updates through posting of notices and bulletins<br>• Donations and sponsorships |

**Membership of Associations**

We maintain active memberships of several industry organizations to mutually learn and share knowledge, expertise and stay updated on emerging trends. We participate and support various industry events and dialogues. Some of our memberships include:

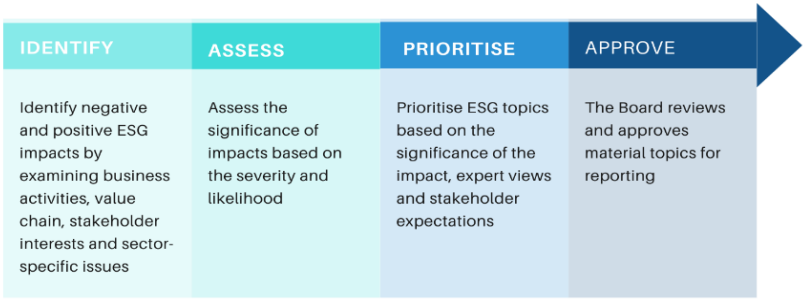
- Singapore Business Federation
- Singapore Concrete Institute
- Singapore National Employers Federation
- The Prefabrication Association of Singapore for Precast and Steel Limited
- Singapore Water Association
- The Singapore Contractors Association Limited
- Singapore Semiconductor Industry Association

# Materiality

Our business operations produce both positive and negative environmental, social and governance impacts. Our approach is to identify, prioritise and focus on the most significant ESG impacts with an aim to maximise our positive contribution to sustainable development and minimise sustainability-linked risks to business. At the same time, we consider the financial materiality of ESG issues relevant to our business which are of interest to our investors.

Therefore, assessing material impacts of our business activities is an ongoing exercise at Chip Eng Seng Construction. Materiality assessment also facilitates developing sustainability strategy and reporting. We use a blend of globally recognised standards such as the GRI Standards, SASB Standards and the TCFD Recommendations to evaluate our material ESG factors for reporting.

**Materiality Assessment Process**




The Board and SMC actively involved in the materiality assessment process and the Board approves the material topics for sustainability reporting.

Building on the last comprehensive materiality assessment carried out in 2020 which senior management representatives from various business segments had participated in a materiality workshop to assess and validate the most significant ESG impacts, both positive and negative, from our operations. In 2023, the SMC reviewed and reassessed our material ESG factors again and mapped the key issues spanning our various business segments. The review considered stakeholders' interests, reporting by peers and the major sustainability trends.

An overview of our material factors and our management approach is presented in the table below.

| Material ESG Factors | Our Involvement | Businesses Where the Impact is Material | Management Approach |
|---|---|---|---|
| **Our Environment** | | | |
| Energy | Direct and through business relationships with sub-contractors | Building Construction<br>Civil Infrastructure<br>Prefabrication Technology | Take energy efficiency measures in design, construction and management |
| GHG Emissions | Direct and through business relationships with sub-contractors | Building Construction<br>Civil Infrastructure<br>Prefabrication Technology | Minimise GHG emissions during construction |
| Waste | Direct and through business relationships with sub-contractors | Building Construction<br>Civil Infrastructure<br>Prefabrication Technology | Minimise waste during construction |
| Water | Direct and through business relationships with sub-contractors | Building Construction<br>Civil Infrastructure<br>Prefabrication Technology | Minimise and conserve water during construction |
| Environmental Compliance | Direct and through business relationships with sub-contractors | All Businesses | Comply with applicable environmental regulation |

| Material ESG Factors | Our Involvement | Businesses Where the Impact is Material | Management Approach |
|---|---|---|---|
| **Our People** | | | |
| Occupational Health and Safety | Direct and through business relationships with sub-contractors | All Businesses | Strive for a zero-accident workplace |
| Employment | Direct and through business relationships with our brand partners | All Business | Build a fair and high-performing workplace |
| Training and Education | Direct and through business relationships with our brand partners | All Business | Provide ongoing opportunities for skills and personal development |
| **Our Customers** | | | |
| Customer Health and Safety | Direct and through business relationships with our brand partners | All Business | Ensure health, safety and security of our customers |
| Customer Privacy | Direct and through business relationships with our brand partners | All Business | Protect and safeguard personal data |
| **Our Governance** | | | |
| Anti-corruption | Direct and through business relationships with sub-contractors and brand partners | All Business | Maintain zero tolerance for fraud and corruption |
| Regulatory Compliance | Direct and through business relationships with sub-contractors and brand partners | All Business | Comply with applicable laws and regulations |

**Contributing to the United Nations Sustainable Development Goals**

The 17 UN SDGs provide a shared blueprint for peace and prosperity for people and the planet. They encompass environmental improvement, social empowerment and greater equality. After aligning our ESG priorities with the UN SDGs, we identified eight goals to which our business actions contribute. We then established specific ESG targets that directly support the relevant UN SDGs targets. These goals underpin our support for sustainable development.

| Material ESG Factors | | Our Forthcoming Annual Targets for FY 2025 | UN SDGs |
|---|---|---|---|
| **Environmental**<br>• Energy [1]<br>• GHG Emissions [2]<br>• Waste<br>• Water | **Building Construction** | • Diesel consumption intensity: < 9 litre per $m^2$ of construction floor area<br>• Electricity consumption intensity: < 7.5 kWh per $m^2$ of construction floor area<br>• GHG emissions intensity: < 0.027 $tCO_2e$ per $m^2$ of construction floor area<br>• Waste generation intensity: < 40 kg per $m^2$ of construction floor area<br>• Water withdrawal intensity: < 0.9 $m^3$ per $m^2$ of construction floor area |  |
| | **Civil Infrastructure** | • Diesel consumption intensity: < 5,500 litre per $million of revenue<br>• Electricity consumption intensity: < 5,800 kWh per $million of revenue<br>• GHG emissions intensity: < 17.0 $tCO_2e$ per $million of revenue<br>• Waste disposal cost intensity: < $1,200 per $million of revenue<br>• Water withdrawal intensity: < 250 $m^3$ per $million of revenue | |
| **Social**<br>• Occupational Health and Safety | | • Zero fatality at workplace<br>• Zero workplace injury<br>• Zero occupational diseases |  |
| • Turnover rate[3]<br>• Training and Education[4] | | • ≤ national average for the industry (construction)<br>• ≥ 14 training hours per employee |  |
| • Customer Privacy | | • Zero incidents of non-compliance with applicable data privacy law | |
| **Governance**<br>• Regulatory Compliance | | • Zero significant[5] incidents of non-compliance with applicable law and regulations |  |
| • Anti-Corruption | | • Zero incidents of fraud or corruption | |

Note:

1. Energy from grid electricity and fuel (diesel, petrol etc.).
2. GHG emissions (Scope 1 and Scope 2) from grid electricity and fuel.
3. Turnover rate is the total number of resigned employees divide by the average number of employees.
4. Training hours per employee is the total number of training hours provided to employees divide by average number of employees.
5. Significant means incident or offence that has consequent of compound fine of $100,000 and more or 7-day and more of stop work order issued by authorities.

# Environment

**Minimising our environmental footprint for a greener tomorrow.**

Amid growing global environmental concerns about the planetary boundaries, climate change, water stress and scarcity, pollution and biodiversity, businesses are expected to do their part and adopt sustainable business practices. At Chip Eng Seng Construction, environmental responsibility is embedded in our business operations. Each of our business segment in the Group adopts policies and measures to minimise its environmental footprint. Our businesses monitor and report their environmental performance against key performance indicators.

Below is our Group-wide environmental performance.

| **Environmental** | **2022** | **2023** | **2024** |
|---|---|---|---|
| Scope 1 emissions ($tCO_2e$) | 5,790 | 5,146 | 6,486 |
| Scope 2 emissions ($tCO_2e$) | 1,176 | 1,331 | 1,293 |
| Scope 1 and 2 emissions ($tCO_2e$) | 6,966 | 6,477 | 7,779 |
| Scope 1 emissions intensity ($tCO_2e$ per $million of revenue) | 9.2 | 9.8 | 11.6 |
| Scope 2 emissions intensity ($tCO_2e$ per $million of revenue) | 1.9 | 2.6 | 2.3 |
| Scope 1 and 2 emissions intensity ($tCO_2e$ per $million of revenue) | 11.1 | 12.4 | 13.9 |
| Energy consumption (GJ) | 88,938 | 81,642 | 99,459 |
| Energy consumption intensity (GJ per $million of revenue) | 142 | 157 | 177 |
| Waste generation (non-hazardous) (tonnes) | 11,648 | 10,237 | 8,158 |
| Waste (non-hazardous) generation intensity (tonnes per $million of revenue) | 18.6 | 19.6 | 14.5 |
| Water withdrawal ($m^3$) | 283,426 | 275,082 | 285,690 |
| Water withdrawal intensity ($m^3$ per $million of revenue) | 452 | 528 | 509 |

| **Energy consumption** | **2022** | **2023** | **2024** |
|---|---|---|---|
| Non-renewal source: | | | |
| Fuel (Litre) | 2,181,073 | 1,938,297 | 2,442,758 |
| Grid Electricity (kWh) | 2,821,614 | 3,230,800 | 3,120,740 |
| Renewal source: | | | |
| Solar (kWh) | 0 | 0 | 13,965 |

As part of our commitment to use renewal energy and reduce emissions, during the year, a building at 2 Tuas South Street 8 under our building construction segment was installed with solar panels. The solar electricity generated at this building was 111,892 kWh and the excess solar electricity of 104,793 kWh generated from the solar panel was sold to the grid.

The Group' scope 2 emissions avoided through the use of solar electricity was about 5.8 $tCO_2e$ for the year.

# Summary of our environmental performance by segments

| Scope 1 and 2 emissions ($tCO_2e$) by segment : | 2022 | 2023 | 2024 |
|---|---|---|---|
| Building Construction | 5,266 | 3,752 | 4,253 |
| Civil Infrastructure | 1,218 | 2,162 | 2,348 |
| Prefabrication Technology | 431 | 500 | 841 |
| Environmental and Sustainability | 3 | 9 | 106 |
| Procurement | 0 | 0 | 0 |
| Corporate Function | 48 | 54 | 231 |
| **Total** | **6,966** | **6,477** | **7,779** |

| Scope 1 and 2 emissions intensity by segments : | 2022 | 2023 | 2024 |
|---|---|---|---|
| Building Construction ($tCO_2e$ per $million of segment revenue) | 13.3 | 13.6 | 12.9 |
| Civil Infrastructure ($tCO_2e$ per $million of segment revenue) | 6.4 | 10.9 | 13.7 |
| Prefabrication Technology ($tCO_2e$ per $million of segment revenue) | 6.6 | 8.9 | 10.2 |
| Environmental and Sustainability ($tCO_2e$ per $million of segment revenue) | 0.1 | 0.1 | 1.6 |
| Procurement ($tCO_2e$ per $million of segment revenue) | 0.0 | 0.0 | 0.0 |
| Corporate Function ($tCO_2e$ per $million of segment revenue) | 11.8 | 1.0 | 22.3 |

| Energy (GJ) consumption by segment : | 2022 | 2023 | 2024 |
|---|---|---|---|
| Building Construction | 67,734 | 46,916 | 55,625 |
| Civil Infrastructure | 15,986 | 28,439 | 30,289 |
| Prefabrication Technology | 4,733 | 5,644 | 9,979 |
| Environmental and Sustainability | 37 | 119 | 1,329 |
| Procurement | 0 | 0 | 0 |
| Corporate Function | 448 | 524 | 2,237 |
| **Total** | **88,938** | **81,642** | **99,459** |

| Energy consumption intensity by segments : | 2022 | 2023 | 2024 |
|---|---|---|---|
| Building Construction (GJ per $million of segment revenue) | 171 | 170 | 168 |
| Civil Infrastructure (GJ per $million of segment revenue) | 83 | 144 | 176 |
| Prefabrication Technology (GJ per $million of segment revenue) | 73 | 100 | 121 |
| Environmental and Sustainability (GJ per $million of segment revenue) | 1 | 1 | 20 |
| Procurement (GJ per $million of segment revenue) | 0 | 0 | 0 |
| Corporate Function (GJ per $million of segment revenue) | 110 | 10 | 216 |

| Water ($m^3$) withdrawal by segment : | 2022 | 2023 | 2024 |
|---|---|---|---|
| Building Construction | 240,232 | 208,561 | 163,418 |
| Civil Infrastructure | 6,462 | 28,766 | 73,148 |
| Prefabrication Technology | 36,732 | 37,734 | 46,467 |
| Environmental and Sustainability | 0 | 0 | 2,356 |
| Procurement | 0 | 0 | 0 |
| Corporate Function | 0 | 21 | 301 |
| **Total** | **283,426** | **275,082** | **285,690** |

**Summary of our environmental performance by segments**

| Water withdrawal intensity by segments : | 2022 | 2023 | 2024 |
|---|---|---|---|
| Building Construction ($m^3$ per $million of segment revenue) | 606 | 757 | 494 |
| Civil Infrastructure ($m^3$ per $million of segment revenue) | 34 | 145 | 426 |
| Prefabrication Technology ($m^3$ per $million of segment revenue) | 564 | 670 | 563 |
| Environmental and Sustainability ($m^3$ per $million of segment revenue) | 0 | 0 | 35 |
| Procurement ($m^3$per $million of segment revenue) | 0 | 0 | 0 |
| Corporate Function ($m^3$ per $million of segment revenue) | 0 | 0 | 29 |

| Waste (tonnes) generation by segment : | 2022 | 2023 | 2024 |
|---|---|---|---|
| Building Construction | 11,141 | 9,107 | 6,477 |
| Civil Infrastructure | 369 | 880 | 1,295 |
| Prefabrication Technology | 138 | 250 | 381 |
| Environmental and Sustainability | 0 | 0 | 5 |
| Procurement | 0 | 0 | 0 |
| Corporate Function | 0 | 0 | 0 |
| **Total** | **11,648** | **10,237** | **8,158** |

| Waste generation intensity by segments : | 2022 | 2023 | 2024 |
|---|---|---|---|
| Building Construction (tonnes per $million of segment revenue) | 28.1 | 33.0 | 19.6 |
| Civil Infrastructure (tonnes per $million of segment revenue) | 1.9 | 4.4 | 7.5 |
| Prefabrication Technology (tonnes per $million of segment revenue) | 2.1 | 4.4 | 4.6 |
| Environmental and Sustainability (tonnes per $million of segment revenue) | 0.0 | 0.0 | 0.1 |
| Procurement (tonnes per $million of segment revenue) | 0.0 | 0.0 | 0.0 |
| Corporate Function (tonnes per $million of segment revenue) | 0.0 | 0.0 | 0.0 |

**Energy**

Grid electricity and diesel consumption at our business constitute a significant part of our energy consumption. Our effort is on reducing energy intensity. In line with our environmental policy, we constantly look for ways to improve our operations' energy efficiency.

| Energy consumption by Source : | 2022 | 2023 | 2024 |
|---|---|---|---|
| Electricity (GJ) | 10,158 | 11,631 | 11,227 |
| Diesel and Petrol (GJ) | 78,780 | 70,011 | 88,232 |
| **Total** | **88,938** | **81,642** | **99,459** |

| Energy consumption by Source : | 2022 | 2023 | 2024 |
|---|---|---|---|
| Grid Electricity (kWh) | 2,821,614 | 3,230,800 | 3,104,584 |
| Solar Electricity (kWh) | 0 | 0 | 13,965 |
| Diesel and Petrol (Litre) | 2,181,073 | 1,938,297 | 2,442,758 |

In 2024, the Group electricity consumption was 3,118,549 kWh compared with 3,230,800 kWh in the previous year. During the same period, our operations consumed 2.44 ML of diesel compared with 1.94 ML in year 2023.

**Solar Energy for Project Sites**

We deploy renewable energy at our project sites where it is possible to reduce energy usage and carbon emissions. For example, we have installed solar photovoltaic panels at project sites, which power a wide range of devices such as noise meters, security cameras, and traffic control systems. We are meeting 100% of our illumination needs at these sites with solar energy.

In 2024, the total energy consumption intensity was 177 GJ per $million of revenue compared with 157 GJ per $million revenue in the previous year. The Group did not achieved the energy consumption intensity target in 2024.

| Our Ongoing Annual Target | Performance in 2024 |
|---|---|
| Energy consumption intensity: < 166 GJ per $million revenue | 177 GJ per $million revenue |
| GHG emissions intensity: < 13.0 $tCO_2e$ per $million revenue | 13.9 $tCO_2e$ per $million revenue |

**GHG Emissions**

The majority of GHG emissions within our operations arise from our consumption of electricity and fuel (diesel and petrol), of which carbon dioxide ($CO_2$) is the primary gas. Our building construction, civil infrastructure and prefabrication technology segments accounts for the majority of our carbon footprint and our efforts are aimed at reducing GHG emissions intensity within these business segments. One measure we have taken is to reduce the number of power generators we use, which in turn reduces our diesel consumption.

We monitor our GHG emissions regularly and report Scope 1 direct emissions and Scope 2 indirect emissions in line with the GHG Protocol and the GRI Standards. Our Scope 1 direct emissions from diesel refer to stationary combustion for power generation at construction sites. Scope 2 emissions are from purchased electricity.

In 2024, the Group total GHG emissions (Scope 1 and 2) was 7,779 tonnes, compared with 6,477 tonnes in 2023. For GHG emissions intensity, we had set a goal of < 13.0 $tCO_2$ per $million of revenue for 2024. Our actual GHG emission intensity for 2024 was 13.9 $tCO_2e$ per $million of revenue. The Group did not achieved the GHG emission intensity target in 2024.

The GHG emissions in 2024 was higher as more diesel was used at all segments though electricity consumption was lower.

Scope 1 direct emissions from diesel was 6,486 tonnes (2023: 5,146 tonnes) and Scope 2 from purchased electricity was 1,293 tonnes (2023: 1,331 tonnes) in 2024.

**Building Materials and Sustainable Construction**

Our choice of building materials and the processes we use in our business play an important role in the overall sustainability of our buildings. Ensuring efficiency, productivity and reducing waste are key components of our sustainability strategy. Increasingly, we use precast concrete walls, improving productivity and reducing pollution at the construction site. We also strive to use sustainable building materials that meet the Green Mark criteria established by the BCA or materials bearing the Singapore Green Label.

Our materials use at our building construction, civil infrastructure and prefabrication technology businesses for the year are summarized below:

| **Quantity of Material Used** (tonnes) | **2022** | **2023** | **2024** |
|---|---|---|---|
| Cement | 91,569 | 65,213 | 113,822 |
| Sand | 174,583 | 164,970 | 159,785 |
| Steel | 46,656 | 44,257 | 40,407 |

**Waste Management**

The waste from our business mainly comprises non-hazardous waste. Our approach is to reduce, reuse and recycle materials to minimise waste. We engage licensed waste management contractors to safely dispose of our waste following the applicable regulations.

**Reducing Waste**

Our approach is to minimise construction waste sent for landfill. We strive to reduce, reuse and recycle waste at our construction sites. It is our standard practice to segregate waste by type to facilitate reuse and recycling. Key types of construction waste include concrete waste, hardcore, steel scrap, timber, general waste and debris, chemical waste, PVC materials, earth, marine clay and other excavation debris, used oil and grease from machinery and equipment, used and leftover paint containing heavy metal/organic solvents, leftover glue or adhesives containing organic solvents, used or leftover lead-acid batteries and waste from horticulture.

Our waste management contractors seep the wastes for reuse and recycle in its plant. In case of horticultural waste it will be recycled through composting. Waste that cannot be recovered for reuse and recycle is directed to either landfilling or incineration.

All reinforced steel bars and metallic materials waste generated from our construction activities are sent for recycling.

Hardcore consists the major part of our waste generated. The total weigh generated reported is a combination of actual weigh taken and estimation when actual weigh is not available.

Total non-hazardous waste generated in 2024 was lower at 8,158 tonnes compared to 10,237 tonnes in 2023 due to lesser waste generated at building construction segment. The waste generation intensity was 14.5 tonnes per $million revenue compared with 19.6 tonnes per $million of revenue in 2023. The Group has achieved the 2024 waste generation intensity target.

| **Our Ongoing Annual Target** | **Performance in 2024** |
|---|---|
| Waste generation intensity: < 18.0 tonnes per $million of revenue | 14.5 tonnes per $million of revenue |

**Water Stewardship**

The group is committed to the responsible use of water throughout our operations. Our policies and measures are aimed at ensuring water saving and conservation. Such measures include water-efficient taps and fittings and dual flush closets with a 5-tick rating by the Public Utilities Board.

We reduce onsite water withdrawal significantly by using precast concrete at our construction sites. We install silty water treatment systems to help prevent water contamination. We harvest rainwater to reduce freshwater demand, and reuse and recycle water wherever possible.

| Our Ongoing Annual Target | Performance in 2024 |
|---|---|
| Water withdrawal intensity: < 526 $m^3$ per $million of revenue | 509 $m^3$ per $million of revenue |

In 2024, our water withdrawal was 285,690 $m^3$ compared with 275,082 $m^3$ in 2023. The net increase was mainly due to higher withdrawal at Civil Infrastructure mitigated by lower withdrawal at Building Construction segments. Water withdrawal intensity in 2024 was 509 $m^3$ per $million of revenue compared with same period of 528 $m^3$ per $million of revenue. The Group has achieved the 2024 water withdrawal intensity target.

**Group-Wide Environmental Performance Data Summary**

Energy use, water withdrawal and the waste generation varies with construction phases. The annual consumption trends may not be entirely comparable as energy use and water withdrawal tend to be higher during a project's middle stages.

Description of our environmental sustainability strategy, policy and practice at our significant business segments (Building Construction, Civil Infrastructure, Prefabrication Technology) are provided at the following sections.

**Building Construction**
Our building construction business is carried out by Chip Eng Seng Contractors (1988) Pte Ltd and CES Engineering & Construction Pte. Ltd. These entities are guided by a Green and Gracious policy to promote environmental sustainability. The building construction business focuses on the following material environmental topics: energy efficiency, emissions reduction, water conservation and waste management. For each area, we have adopted reduction targets.

We incorporate green design, sustainable materials, improved productivity through technology and innovation, pollution control, and efficient construction practices. We also engage our key stakeholders, including employees, building authorities, contractors and suppliers, to seek feedback and suggestions to improve our environmental performance.

Our teams closely monitor the performance by collecting and reviewing environmental data with periodic updates to the senior management and the Board.

**Environmental Management System**
Several of our principal subsidiaries have obtained the ISO 14001:2015 certification to ensure accountability and continuous improvement, adhering to international standards. Our comprehensive Quality, Environmental, Health and Safety ("QEHS") system takes an integrated approach to environmental management, quality and safety in our businesses. This system encompasses policies and practices covering product quality and safety, workplace safety and health, and measures to minimise our environmental impact.

**Energy Consumption**
Our project sites use significant electricity and diesel. Our efforts focus on reducing our energy consumption intensity.

**Energy Efficiency Measures**
Our project teams constantly look for ways to improve our operations' energy efficiency. Our project sites and factories which account for most of our energy consumption, we continue to drive several energy-saving initiatives. Some of the initiatives include:

- Using energy-efficient T8 light-emitting diode ("LED") lights.
- Using 3-tick energy-saving air-conditioning units.
- Maintaining air-conditioning temperatures at 25°C.
- Reducing the number of power generators to reduce diesel consumption.
- Using biodiesel to run generators and machines onsite.
- Deploying energy-saving office printers.
- Running awareness campaigns to educate our employees on the individual actions they can take to save energy.
- Installing motion-detection sensors in toilets to switch lights on or off automatically.
- Powering our noise meters with solar PV.
- Using window blinds to minimise the heat from outside and therefore reduce the air-cooling requirements.

**Battery Energy Storage System**
As part of our strategy to reduce emissions, in 2024 building construction segment has committed to purchase 12 units of battery energy storage system (BSEE). 7 units of BSEE have been deployed at two new project sites in Tengah Brickland and Uln Pandan. The balance units will be deployed progressively over the construction periods.

**Waste Management**
The waste from our building construction projects mainly comprises non-hazardous waste. Our approach is to reduce, reuse and recycle materials to minimise waste. We engage licensed waste management contractors to safely dispose of our waste following the applicable regulations.

**Reducing Waste**
Our approach is to minimise construction waste sent for landfill. We strive to reduce, reuse and recycle waste at our construction sites. It is our standard practice to segregate waste by type to facilitate reuse and recycling. Key types of construction waste include concrete waste, hardcore, steel scrap, timber, general waste and debris, chemical waste, polyvinyl chloride materials, earth, marine clay and other excavation debris, used oil and grease from machinery and equipment, used and leftover paint containing heavy metal/organic solvents, leftover glue or adhesives containing organic solvents, and used or leftover lead-acid batteries.

Some of the measures to reduce waste at construction sites include the following:
- Using machineries such as scissor lifts, boom lifts and gondolas to reduce the use of scaffolding.
- Extensive use of precast segments that reduces construction waste and dust.
- Using prefabrication rebar cage system to reduce rebar wastage at site.
- Reusing materials such as galvanized iron pipe, rebar, angled bar, and hollow sections for other purposes at the site as cable holders, demarcation, footwear holders, flowerpot holders, fire extinguisher holders and safety boot holders.
- Reusing pails, timber and bottles for plantation, cable drums and timber as a cosy table, and damaged sunny hose as a silt trap.
- Converting recycled rebars and metal boards into a bench for workers to rest.
- Using excess plywood to make signages.
- Using drywall and autoclaved aerated concrete blocks in construction to reduce brick wastage.
- Using Hubble, an online safety management system, to reduce paper use and increase productivity.

**Smart Building Design**
We embed green building features right from the design stage. This includes integrating BCA Green Mark elements in our projects and using Singapore Green Label products to reduce our environmental impact.

Common elements in projects completed by us include recycling bins at the void deck area of residential blocks, covered bicycle parking lots to facilitate the use of cycling among residents, internal waterproofing, interlocking concrete pavers and paving material, earth retention and slope protection material, subsurface drainage cells, calcium silicate board for false ceilings and protection of gas pipes, tile grout, concrete kerb, internal skin coat, aluminium composite panels, roof and gutter waterproofing, green-certified tile adhesive and polyurethane enamel paint system to steelworks.

**Water Stewardship**
The business segment is committed to the responsible use of water throughout the construction operations. Our policies and measures are aimed at ensuring water saving and conservation. Such measures include water-efficient taps and fittings and dual flush closets with a 5-tick rating by the Public Utilities Board.

We reduce onsite water consumption significantly by using precast concrete at our construction sites. We install silty water treatment systems to help prevent water contamination. We harvest rainwater to reduce freshwater demand, and reuse and recycle water wherever possible.

**Wastewater Management**
Wastewater from construction sites can block drains and cause flooding due to contamination with silt and mud and harm the ecosystem. Other potential contamination at work sites may include oil and chemicals. Therefore, it is important to treat the wastewater before discharge. At our construction sites, wastewater is collected, treated and discharged according to environmental regulations. We implement earth control measures to manage silty discharge due to rain.

We maintain wastewater quality by monitoring the total suspended solid concentration ("TSS"). TSS sensors and reading instruments are installed at all water treatment tanks. Closed circuit televisions are installed at discharge points to monitor the quality of the discharged water.

We strive to recycle wastewater as much as feasible. The recycled water is used for various purposes, such as washing vehicles as well as cleaning workers' toilets and site office areas.

**Pollution Control**

Dust and vibrations, noise from vehicles, heavy equipment and machinery and construction work are common pollution hazards. Any construction work involving concrete, cement, wood, stone, and silica will produce dust. However, pollution can be minimized by implementing strict control measures.

We are committed to minimize all types of pollution from our construction activities. We follow regulatory guidelines and industry best practices for lowering pollution. We install fine mesh screens and use water sprays to prevent dust from dispersing, limiting dust pollution. Our measures include continuous monitoring of our construction operations and ensuring regular maintenance of the equipment and machinery to keep noise levels within safe and permitted limits. We use precast concrete panels fabricated offsite, which also helps mitigate noise at our construction sites. We implement measures to ensure that vibrations caused by piling and demolition do not exceed permitted limits.

**Civil Infrastructure**

The Group's civil infrastructure segment, CES_SDC Pte. Ltd. ("CES_SDC") offers a broad spectrum of engineering and construction services from tunnel boring to modular construction spanning civil, industrial and utility infrastructure projects.

CES_SDC is committed to minimize its environmental footprint. In line with its commitment, CES_SDC has obtained the ISO 14001:2015 for its environmental management system. Measures adopted by CES_SDC to reduce the environmental impact of its projects include the following:

**Water Conservation**

- Monitoring water withdrawal.
- Onsite water treatment and recycling.
- Onsite rainwater harvesting for reuse in construction activities such as cleaning and concrete mixing, and
- Water-efficient fittings to save water.

**Energy Efficiency**

- Monitoring energy consumption.
- Preference for using energy-efficient appliances, equipment and devices.
- Employee awareness for promoting responsible energy use.
- Energy-efficient LED lighting.
- Climate-friendly 5-tick air-conditioning equipment.
- Solar lights at construction sites, and
- Solar panels to power onsite security cameras.

**Protecting Biodiversity**

At CES_SDC, our policy is to minimize negative impact on flora and fauna from our civil infrastructure projects in or near ecologically sensitive areas such as nature reserves, nature areas, areas of biodiversity interest and all coastal and marine development projects. For such projects, we conduct a comprehensive Biodiversity Impact Assessment ("BIA") using relevant guidelines such as the Biodiversity Impact Assessment Guidelines issued by the National Parks Board, Singapore. Based on the BIA, we implement an Environmental Monitoring and Management Plan ("EMMP"). We engage biodiversity experts to assist us in developing, implementing and monitoring the EMMP.

**Our EMMP measures to protect fauna and flora could include:**

- Passive wildlife shepherding.
- Maintain hoarding integrity.
- Pre-felling fauna inspection
- Use fully biodegradable erosion control blankets.
- Ensure no fauna entrapments.
- Wildlife-proof food waste bins.
- Pegging of boundary line before site clearance.
- Arboriculture works.
- Monthly fauna and flora inspection by biodiversity experts.
- Regular checks to ensure compliance
- Wildlife response plan

**Prefabrication Technology**

Our prefabrication technology business is carried out by CES-Precast Pte. Ltd, CES_Precast Sdn. Bhd. and CES_INNOVFAB Pte. Ltd. This business segment consists precast concrete and concrete based 3D printed products.

The prefabrication technology segment focuses on the following material environmental topics: energy efficiency, emissions reduction, water conservation and waste management. For each area, we have adopted reduction targets.

Precast concrete refers to concrete produced in factories, as opposed to cast-in-place concrete that is produced on a construction site. Since it is produced in a controlled environment, precast concrete is typically of a higher quality than concrete produced on a project site.

The moulds used during the precast process can be reused several times, as opposed to their site-specific counterparts. The use of precast segments helps to reduce construction waste, dust and noise. Overall, using precast improves productivity and reduces pollution at construction sites.

SINGAPORE GREEN BUILDING COUNCIL

SINGAPORE GREEN BUILDING PRODUCT CERTIFICATE

AWARDED TO
CES-Precast Sdn Bhd
PTD102945 Jalan Idaman Senai Industrial Park
Senai Johor
Malaysia 81400

FOR THE PRODUCT
Ready-Mixed Concrete

PRODUCT BRAND
CESP

PRODUCT MODEL
40N-LH,50N-LH,40N-LH(Green),50N-LH(Green), 60N-LH (Green), 75N-LH (Green), 85N-LH (Green)

THE PRODUCT HAS BEEN ASSESSED ACCORDING TO THE ASSESSMENT CRITERIA OF SINGAPORE GREEN BUILDING PRODUCT CERTIFICATION SCHEME. IT HAS BEEN AWARDED THE RATING:

SINGAPORE GREEN BUILDING PRODUCT SGBC ✓✓✓✓ LEADER

Director
SGBC Pte Ltd

| Certificate Number | Original Issue Date | Revised Date | Valid Till |
|---|---|---|---|
| SGBP 4137 | 11 June 2023 | 30 July 2024 | 10 June 2025 |

✓Good ✓✓Very Good ✓✓✓Excellent ✓✓✓✓Leader

The use and reliance on this certificate is subject to the terms and conditions of the Singapore Green Building Product Certification Scheme. Revised certificates may also be issued at the discretion of the Council. The certification status may be verified at the Singapore Green Building Council website (www.sgbc.sg).

Our precast factory in Senai, Malaysia is awarded with Singapore Green Building Product Certificate (√√√√Leader) for Ready-Mixed Concrete. The factory is capable to batch green concrete. Green concrete is more environmental friendly that standard concrete as it uses less energy in its production and produces less carbon dioxide than standard concrete. The factory uses recycled materials such as pulverised fly ash to produce low-carbon, green concrete to reduce the impact on the environment. Green concrete has a carbon emission of an estimated 150 $kgCO_2e$ per cubic meter of concrete compared with standard concrete's emissions of 205 $kgCO_2e$.

In line with its commitment, CES-Precast Pte. Ltd. has obtained the ISO 14001:2015 and ISO 45001:2018 management system. While, CES_INNOVFAB Pte. Ltd. has obtained ISO 9001:2015, ISO 14001:2005 and ISO 45001:2018 management system.

**Green Concrete**
In 2024, our precast factory produced 5,501.7 $m^3$ (2023: 1,092.5 $m^3$) of low-carbon, green concrete for 2 projects.

Compared with normal concrete, green concrete emits about 27% or 55 kg less carbon dioxide per cubic meter ($m^3$) of concrete. The use of green concrete in the two projects avoided about 302.6 tonnes (2023: 60.1 tonnes) of emissions.

**Environmental & Sustainability**

This segment consists of companies in the Group that provide wastewater treatment and environmental engineering business. The companies are CES_Salcon Pte. Ltd., CES ECO Solutions Pte. Ltd., CES-Salcon Technologies Pte. Ltd., CES_Salcon Sdn. Bhd., P.T. CES_Salcon International.

The principal company in this segment is CES_Salcon Pte. Ltd (CES_Salcon). CES_Salcon is on a mission to revitalise the world's water resources using the most advanced water and wastewater engineering and technology. CES_Salcon has designed and constructed more than 800 industrial and municipal water and wastewater treatment plants in 60 countries globally. CES_Salcon remains focused on providing energy-efficient water and wastewater solutions.

Industrial wastewater may contain high levels of chemicals, effluents and toxins which are extremely harmful to humans and the environment. Our purpose-built treatment solutions convert industrial wastewater into a form that can be safely released into the environment or recycled and reused.

Our municipal water and wastewater treatment solutions bring clean and safe drinking water to communities. We engineer solutions for the proper treatment and disposal of municipal wastewater and sewage.

Our dual objectives are to provide communities with access to clean and safe drinking water, while also ensuring that the wastewater generated by these communities does not harm ecosystems and is recycled for reuse.

**Protecting the Environment**

A number of wastewater treatment plants we have designed and constructed are helping conserve precious water resources worldwide.

Here are two examples. In Saudi Arabia, King Salman Marine Shipyard - Industrial Wastewater Treatment Plant is designed to treat and recover the wastewater generated from the shipyard. The plant has the capacity to treat about 300,000 $m^3$ water per year to safe levels before reuse in cooling tower system and or before discharging into the sea.

The wastewater treatment plant at Farabi Petrochemicals in Saudi Arabia has the capacity to treat about 230,000 $m^3$ water per year to safe levels before discharge into the sea.

During the year, CES_Salcon joint ventured with CES_SDC Pte Ltd to carry out engineering and construction projects. The segment accounts for its energy, emissions, water and waste based on its financial control in the joint ventures. The segment reported increased used in energy, emissions, water and waste in 2024 compared with 2023 due to the joint construction projects.

# TCFD Report

**Climate Change**

We recognise that climate change poses an existential threat to the planet. Rising global temperatures can trigger extreme weather conditions and events such as floods and hurricanes, droughts and heatwaves, and rising sea levels. These events directly impact food supplies, ecosystems, coastal stability, and public health. If not checked, climate change can have a devastating effect on economies and societies and the businesses that operate within them. It is widely accepted that there is a global urgency to transition to a lower- carbon economy.

As the world rallies to meet the required goal of limiting global temperature rise to well below 1.5˚ Celsius as set out in the Paris Agreement, at Chip Eng Seng Construction, we are doing our part to reduce GHG emissions within our business activities.

We are working toward developing strategies to build climate resilience across our business divisions. The first step is to understand potential risks and opportunities from climate change and their financial impact on our businesses. We use the TCFD framework to facilitate this understanding. With the support of an external consultant, in 2021 we carried out a qualitative analysis of the potential financial impact of climate change on our core business activities. We plan to undertake a more detailed climate-scenario analysis to develop a deeper understanding of the potential financial impacts of climate change on our businesses. With this, we will continue to broaden our TCFD reporting.

Based on the TCFD Recommendations, our climate-related disclosures are presented below.

| | |
|---|---|
| **Governance** | |
| Describe the board's oversight of climate-related risks and opportunities. | At Chip Eng Seng Construction, the Board has overall responsibility for the Group's sustainability strategy, including climate-related risks and opportunities. The Board provides leadership and strategic directions to the management to adopt relevant policies and responses. The board regularly evaluates potential climate-related risks and opportunities as part of the comprehensive risk assessment and maintains strategic risk management oversight. The Board also determines material ESG factors, including climate-related metrics and targets. |
| Describe management's role in assessing and managing climate-related risks and opportunities. | Under strategic direction from the Board, the SMC comprises of CEO, CFO and CCO supervise the adoption and implementation of climate strategies and policies and provides regular updates to the Board. The SMC is supported by business leaders and function heads in sustainability initiatives, execution of policies, monitoring of performance and reporting. |
| **Strategy** | |
| Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term. | Please refer to the climate-related risk and opportunity section for more information. |
| Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning. | |
| Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. | In line with SGX's phased implementation approach for TCFD adoption, the Group will incorporate scenario analysis in our subsequent sustainability reports. |

| | |
|---|---|
| **Risk Management** | |
| Describe the organisation's processes for identifying and assessing climate related risks. | Based on TCFD risk types and classification, the Group conducted an analysis covering physical risk and transition risks and opportunity.<br><br>Each risk is then assessed based on the likelihood of occurrence and consequence of the impact arising from the risk based on our ERM framework. |
| Describe the organisation's processes for managing climate related risks. | The group priorities the risk then responses and manages the risk based on the appetite level accordance to our ERM framework. |
| Describe how processes for identifying, assessing and managing climate related risks are integrated into the organisation's overall risk management. | The Board and management team undertake periodic review of the identified climate-related risks and the risk management approach. |
| **Metrics and Targets** | |
| Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process. | Our businesses emitted GHG and impacted on global warming, we recognize our responsibility to help reduce GHG emissions from the built environment.<br><br>We currently report Scope 1 and 2 emissions for our businesses. In the future, we plan to develop a process to assess, validate and monitor our material Scope 3 emissions. |
| Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks. | More information about our climate-related metrics and targets adopted by the Group is detailed in Environment chapter. |
| Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets. | We have established targets for energy, GHG emission, waste and water efficiency reduction and we regular monitor and report our performance against these targets. |

**Risk Management**

Based on TCFD risk types and classification, we have conducted an analysis covering the following two risk categories:

**Physical risks:** Physical risks are associated with event-driven acute risks, including increased severity of extreme weather events, such as cyclones, hurricanes, or floods, and chronic risks arise from longer-term shifts in climate patterns, such as rising temperatures that may cause sea level rise or chronic heat waves. Physical risks may cause a financial impact on businesses, such as direct damage to assets and indirect impacts from disruption to business operations.

**Transition risks:** Risks associated with extensive policy, legal, technology, and market changes required to transition to a low-carbon economy. Transition risks may have financial and reputational implications for businesses.

**Below are our Climate-related Risk and Opportunity.**

| **Climate Change Related Risks** | | |
|---|---|---|
| **Risk Type** | **Risk Description and Impacts** | **Risk Mitigation** |
| **Physical Risk** | | |
| Acute<br><br>Increased severity of extreme weather events such as cyclones and floods | Higher flood risk can potentially damage our factories and project sites and disrupt operations resulting in loss of revenue and repair higher costs.<br><br>A higher risk of floods and cyclones can also increase our insurance costs. Also, potential disrupt transportation routes and impact delivery of construction material to our project site/factories. | The Group will integrate relevant flood control measures at each of its project site and site office and also to plan and design its storage for its production and construction material at appropriate elevated height. |
| Chronic<br><br>Changes in precipitation patterns and extreme variability in weather patterns<br><br>Rising mean temperatures | A warming climate can increase thermal stress and health risks for our employees, particularly construction workers and other workers who spend the majority of their time outdoors.<br><br>Rising temperatures will lead to longer dry spells and likely exacerbate water stress. This could result in higher water costs and water efficiency investments, and disrupt our precast production and operations that uses significant water. | The Group follows protocol issued by authority on measures to reduce heat stress for outdoor workers. This includes provide shaded areas, regular rest breaks, water for hydration.<br><br>The site safety officers are equipped with heat stress device to monitor the temperature and check on worker fitness to work to prevent heat induced work accidents. |
| **Transition Risk** | | |
| Policy | • Increasing carbon tax rate by regulator may indirectly increase our operational costs as energy vendor may pass on the carbon tax to its consumers.<br>• Increasing regulatory around climate reporting may lead to higher compliance costs.<br>• Increasing requirement for energy efficiency building property may lead for more capital expenditures for property enhancement. | Increase use in renewal energy such as solar power at our project sites, factories and office. Continue to drive energy-saving initiatives. |
| Legal | • Failure to comply with increasing new regulation or production specifications may lead to potential litigation. | The Group shall engage its customers to agree on required green label or sustainable materials such as cement, tiles, timber and steel etc. for its construction and production. |

| **Climate Change Related Risks** | | |
|---|---|---|
| **Risk Type** | **Risk Description and Impacts** | **Risk Mitigation** |
| **Physical Risk** | | |
| Technology | • The need to transition to new low-carbon technologies across our businesses could lead to new capital investment and write-off and early retirement of existing plant and equipment. | The Group shall carefully assess and evaluate all new significant plant and equipment investment that can meet the required carbon standard before buying. |
| Market | • Changing customers' preferences, such as demand for builders with energy and water management system standards may lead to higher overall costs of operating our business.<br>• Changes in investors and financier preferences and expectations on ESG considerations may lead to reduce access to capital and financing or higher borrowing costs.<br>• Inability to meet customers' sustainability expectations such as green and gracious builders and builder with green accreditations could erode our competitiveness to win tenders or contracts for projects that focus on awareness of climate change. | The Group will regularly engage its stakeholders which include regulators, investors, customer/clients, financier, employee and industry to understand the market direction and climate-change related best practices and to adapt its business model and strategy. |
| Reputation | • Failing to adopt best industry climate-related risk practices and lower ESG ratings can affect the corporate reputation. | The Group shall regularly engage stakeholders on ESG issues and commit resources to adopt best practices suitable to its businesses. |
| **Climate-Related Opportunities** | | |
| Resource Efficiency | Enhancing energy efficiency and water conservation in our operations and investment properties can reduce costs. The saving could be substantial in a high energy price environment. | The group will explore suitable energy efficient technology and exploit available opportunity. |
| Energy Sources | Adopting renewable energy, such as solar power at construction sites and at our factories, could enhance our energy resilience and reduce our carbon footprint. | The group will explore suitable energy efficient technology and exploit available opportunity. |
| Products and Services | A range of opportunities exists across our businesses. Providing green design, engineering and construction services could enhance our competitiveness. | The group will exploit opportunity with our technology knowhow and experience. |

In 2022, the Board of Directors attended a training workshop on ESG Essentials, conducted by the Singapore Institute of Directors. Previously, the Board has also attended a climate risk workshop in December 2021 conducted by a sustainability consulting firm to develop the necessary capabilities for managing climate-related risks and opportunities across the businesses.

Each of our business is developing and adapting its business strategy to mitigate climate risks and embrace climate-related opportunities. Our approach is to reduce GHG emissions across our businesses to lower our operational footprint. We will continue to adopt green construction materials, methods, and green technologies to minimise the impact on climate.

# People

**We are committed to promoting an inclusive and fair workplace where our employees can realise their full potential.**

Our employees are at the heart of our success. Attracting and retaining talented employees to deliver our high-quality projects and services is crucial for our business performance. Our human resource policies promote a professional working environment built on mutual respect and trust. Safety forms a key pillar of our employees approach: ensuring safety for all at our project sites remains our foremost priority at all our businesses.

**Employment**
At end of 2024, the Group employed 807 employees (2023: 725) of which 797 (2023: 723) were full-time and 10 (2023: 2) were part-time employees. During the year, the Group hired 218 (2023: 178) new employees. The average age of our employees is about 42 years old (2023: 43 years old).

| Employees | 2022 | 2023 | 2024 |
|---|---|---|---|
| Full-time | 697 | 723 | 797 |
| Part-time | 1 | 2 | 10 |
| | | | |
| Permanent | 698 | 705 | 797 |
| Temporary | 0 | 20 | 10 |

In 2024, we also employed 917 (2023: 970) foreign construction workers on a fixed-term contracts, 832 (2023: 884) workers in Singapore and 85 (2023: 86) workers at our precast factory in Senai, Malaysia.

Further details on how we manage the wellbeing of our foreign construction workers can be found on page 44.

**Diversity**
The Group's business operations span 7 economies. Promoting an inclusive work culture that respects diversity is a core part of our ethos at Chip Eng Seng Construction Group and helps us successfully within our multicultural environment. We monitor our diversity performance by regularly reviewing data relating to gender, age, hiring and turnover at all employment levels.

Our workforce reflects our rich diversity comprising people from different backgrounds, nationalities and ethnicities. This mix fosters a range of perspectives, approaches, and competencies and lived experiences. We are committed to ensuring that we provide equal opportunities in employment, remuneration, training and promotion based on merit and performance.

There is no female in the board governance role in 2024 and in 2023. However, female employees occupied managerial and supervisory roles in 2024 has increased to 23% compared with 22% in the prior year.

**Human Capital**

Our focus remains on maintaining our ability to attract, develop and retain talent that helps us excel in project execution, safety culture, quality and productivity, and innovation. An overview of our people performance covering the business segments and corporate function is provided below.

**Training**

Investing in the training and development of our people is crucial for employee well-being and supporting our business growth, and we provide ongoing training and development opportunities to ensure our people have the right skills to perform their jobs effectively. Developing talent within our organisation also helps retain high-quality, valued workers who hold valuable knowledge of the business and often demonstrate greater levels of commitment to the Group.

| Our Ongoing Annual Target | Performance in 2024 |
|---|---|
| Average Training Hours: > 8.6 hours per employee | 11.6 hours per employee |

In 2024, our employees took part in a variety of training courses, workshops and conferences on the following topics: online end-user cybersecurity, first aid for adults and children, safety management, workplace safety, construction productivity, health and environmental management, sustainability reporting, quality and productivity, lean construction, best practices for green and gracious builders, earth control measures, construction regulations, service excellence, virtual design and construction, contract management, project management, ethical business conduct, latest developments in construction law, and personal data protection.

**Employee Turnover**

In 2024, our annual turnover rate for the Group was 19.4%, which is higher than the national construction industry resignation rate of 14.4% (Labour Market Survey Report Fourth Quarter 2024). Compared with 2023 of 20.7%, the Group has improved to reduce the turnover rate.

| Our Ongoing Annual Target | Performance in 2024 |
|---|---|
| Employee Turnover:<br>To maintain below the national average of the construction industry | 19.4% against the national construction industry rate of 14.4% |

**Performance Management**

Permanent employees participate in a performance appraisal twice a year. The performance evaluation helps determine training needs and skills gaps within the organisation and helps us develop career pathways for our staff.

**Welfare and Reward**

Acknowledging and rewarding staff for their service is a key part of our human resources policy. Along with competitive compensation, we provide bonuses, performance-based wage increases, and various other benefits to attract and retain talented employees. Regarding employee wellbeing, we provide out-patient, inpatient and dental medical insurance coverage. Other benefits include personal accident insurance, welfare gifts and different types of leave benefits e.g. annual, marriage and compassionate leave.

In 2024, 3 male employees (2023: 4 female and 1 male) are entitled to parental leave and all took the leave to care of their new-born babies and all returned to work after the parental leave ended. All employees are still employed 12 months after their parental leave ended.

Our Return to work and Retention rate is as follows:

| | Female | Male | Overall |
|---|---|---|---|
| Return to work rate | 100% | 100% | 100% |
| Retention rate | 100% | 100% | 100% |

Parental leave: leave granted to men and women employees on the ground of the birth of a child

$$\text{Return to work rate} = \frac{\text{Total number of employees that did return to work after parental leave}}{\text{Total number of employees due to return to work after taking parental leave}} \times 100$$

$$\text{Retention rate} = \frac{\text{Total number of employees retained 12 months after returning to work following a period of parental leave}}{\text{Total number of employee returning from parental leave in the prior reporting period}} \times 100$$

**Upgrading Workforce Skills**
The group helps Basic-Skilled foreign construction workers upgrade to the Higher-Skilled R1 category (following the criteria set out by the Ministry of Manpower) through a skills improvement programme. Investing in upgrading our foreign workers' skills leads to higher productivity and a lower levy that we are required to pay. Furthermore, Higher-Skilled R1 workers can be employed for an extended period of up to 26 years instead of just 14 years for Basic-Skilled workers.

Ensuring all of our construction workers receive training leads to better work practices, increased quality and productivity, and improved health and safety, since the workers gain the most up to date knowledge on trade code and regulations, new installation methods, equipment, materials, and tools.

In 2024, 121 (2023: 142) Higher-Skilled R1 construction workers have completed their Continuing Education and Training. In total these Higher-Skilled R1 construction workers clocked 696 hours (2023: 798.5 hours) in their training. 14.5% of our workers with work-permit holder have attained R1 skilled status compared with 17% in 2023.

**Nurturing Future Talent**
Investing in young talent is essential for helping shape a strong workforce for the future. We invest in young talent by offering internship opportunities to university and polytechnic students to help them gain practical work experience. In 2024, we provided internship opportunities for 4 (2023: 21) undergraduates in oversea and local universities for periods ranged between 2 and 12 weeks (2023: between 13 and 30 weeks). These interns are assigned to various departments, project sites and they are mentored by experience engineering and managers to help them to gain practical work experience.

Since 2020, we had supported the BCA-Industry iBuildSG Scholarship / Sponsorship programmes that aims to nurture future talent for the industry. Nine undergraduates had since benefited from this scholarship provided by the Group. The Group will continue to collaborate, participate and provide such scholarship programmes to inspiring undergraduates pursuing construction engineering course.

**Health and Safety**
Keeping our employees, contractors, customers, visitors and suppliers safe and healthy throughout their interactions with our business is of paramount importance to us. We have in place various measures to keep them safe and healthy.

**Promoting Workplace Safety and Health**
Workplace safety remains a critical issue for the construction sector. There were 43 workplace fatal injuries in 2024 in Singapore and the construction sector was the top contributor of 20 fatal workplace injuries according to the Ministry of Manpower ("MOM") Workplace Safety and Health Report.

At our construction business, we have adopted Zero Harm vision, where every accident is preventable. In line with this vision, implementing a safety-first culture is integral to our business model, spanning the entire business segments from top-level management to site supervisors and workers. We maintain rigorous safety standards to ensure a safe workplace for our workers and contractors. Our target is to maintain a zero-accident workplace.

Hazard identification, risk assessment and risk control form the core of our safety measures. We comply with national safety regulations and align our work processes with industry standards for safe construction. Our HSE system ensures that workers and contractors follow stringent standards and operating procedures for safety and health at each construction stage.

Regular safety briefings and training is provided to our employees to ensure they are all well informed of the safety risks inherent in various construction activities and are fully educated on safe work practices.

| Our Ongoing Annual Target | Performance in 2024 |
|---|---|
| Zero fatalities | 1 |
| Zero accidents | 15 reportable incidents |
| Zero occupational diseases | 0 |

Along with safety briefings and training, our health and safety management systems require us to carry out checks and inspections throughout the year. Any non-compliance issues are reported during the monthly Safety Committee meeting.

**Leading Performance Indicator**

Our Group adopts leading indicators and set annual targets to measure their safety performance for the year. All leading indicators achieved its target except for observations.

| Leading Indicators | Target (per site per month) | Performance (per site per month) |
|---|---|---|
| Management Safety Walk | 1 | 2 |
| Health Safety & Environment ("HSE") Inspection/Audit | 30 | 67 |
| Observations | 60 | 58 |
| HSE Promotions | 2 | 6 |
| Experiential Work Safety and Health ("WSH") Learnings | > 4 | 5 |
| Permit to Work ("PTW") Assessment | > 2 | 2 |

Target not achieved  Target achieved

Notes:

**Management Safety Walk**: A safety walk is when senior management (managing directors or project directors) observes work taking place, inspects the workplace and discusses safety performance with employees and workers based on their observations. By leading and conducting a safety walk, senior management can point out unsafe practices when they occur in the real work environment, providing employees and workers with safe alternatives and means to understand why their practices are unsafe.

**HSE Inspection/Audit**: An inspection is a formalised process of documenting safety hazards and unsafe work practices at site. An audit is a formalised process which assess the workplace's health and safety procedures to determine compliance and assess weaknesses in its safety program.

**Observations:** Safe and unsafe acts/conditions recorded during site HSE inspections, management walks, HSE audits, behavioural-based observations etc.

**HSE Promotion**: A set of unique means, processes and activities that are used to develop, sustain and improve safety through awareness raising and changing behaviours among all personnel. Examples of safety promotion include the development of internal products and actions such as posters, bulletins, leaflets, audio-visual materials, toolkits, manuals and guides, social media, e-applications, conferences, safety events and campaigns.

**Experiential WSH Learnings:** Job/trade specific WSH training/learnings conducted proactively by Trade-in Charge (e.g. Core Trade) and supplemented by Health, Safety, Security and Environmental ("HSSE") personnel.

**PTW Assessment:** Independence audits of the site's PTW system to determine the level of compliance to the PTW procedure and evaluate its effectiveness as a tool for control of safety critical works. This may be carried out using Group HSSE issued PTW Assessment Checklist or similar assessment tool.

**Safety Performance**

By regularly monitoring and reviewing the safety performance at our construction sites against key performance indicators, we can ensure we are maximising our efforts in this critical area and responding in a timely manner to any deviances from our high safety standards. A summary of our safety performance for all employees and workers (include indirect workers) can be found in the following table.

| | | | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Hours worked | | | 9,694,314 | 8,604,852 | 11,461,026 |
| GRI 403-9 | Fatality as a result of work-related injury | Number | 0 | 0 | 1 |
| | | Rate(1) | 0.00 | 0.00 | 0.09 |
| | High-consequence work-related injuries (exclude fatal) | Number | 0 | 0 | 3 |
| | | Rate(2) | 0.00 | 0.00 | 0.26 |
| | Recordable work-related injuries | Number | 7 | 4 | 16 |
| | | Rate(3) | 0.72 | 0.46 | 1.40 |
| | | | | | |
| SASB IF-EN-320a.1 | Total recordable incident rate | Rate (per 200,000 hours worked) | 0.14 | 0.09 | 0.28 |
| | Total fatality rate | Rate (per 200,000 hours worked) | 0.00 | 0.00 | 0.02 |
| | | | | | |
| MOM's definition used | Total workplace injury | Rate (per 100,000 workers) | 193 | 141 | 449 |
| | Fatal workplace injury | Rate (per 100,000 workers) | 0 | 0 | 28 |

The above data and information exclude a joint venture which the Group has 40% equity control.

Calculation formula:

(1) Rate of fatalities as result of work-related injury = (Number of fatalities as a result of work-related injury/ Number of hours worked) x 1,000,000 hours worked.

(2) Rate of high-consequence work-related injuries rate (excluding fatalities) = (Number of high-consequence work-related injuries/ Number of hours worked) x 1,000,000 hours worked.
High-consequence work-related injuries refers to injuries from which the worker cannot recover or does not or is not expected to recover fully to pre-injury health status with 6 months.

(3) Rate of recordable work-related injuries = (Number of recordable work-related injuries/Number of hour worked) x 1,000,000 hours worked

MOM's definition for rate used:
Total workplace injury rate = (Number of fatal and non-fatal workplace injuries/Number of workers) x 100,000 workers

Though the Group did not meet the target to achieve zero workplace accident in 2024. Our total workplace injury rate of 449 (per 100,000 workers) was lower compared with Singapore construction industry rate of 523 (based on Workplace Safety and Health Report 2024). While, our fatal workplace injury rate of 28 was higher compared with construction industry annualised rate of 3.7 (based on Workplace Safety and Health Report 2024).

**Safety Awards**

Our commitment to ensuring high safety standards is reflected in the awards and recognitions we have received over the years. In 2024, 4 (2023: 5) of our projects are winners for WSHC Workplace Safety and Health SHARP Award.

| | Company (Project name) |
|---|---|
| 1. | Chip Eng Seng Contractors (1988) Pte Ltd (Hougang N2C11 – Kovan Well Spring) |
| 2. | Chip Eng Seng Contractors (1988) Pte Ltd (Tampines N8C31 – Tampines Green Spring) |
| 3. | Chip Eng Seng Contractors (1988) Pte Ltd (Pasir Ris N5C26/C27 – Costa Grove) |
| 4. | CES_SDC Pte. Ltd. (TWRP Contract C4A – Biosolids and Digester) |
| 5. | WSHC Innovation Award for Chip Eng Seng Contractors (1988) Pte Ltd |
| 6. | WSHC bizSAFE Partner Award for Chip Eng Seng Contractors (1988) Pte Ltd |
| 7. | WSHC Workplace Safety and Health Performance Award (Silver) for Chip Eng Seng Contractors (1988) Pte Ltd |
| 8. | SCAL Workplace Safety and Health Innovation Award for Chip Eng Seng Contractors (1988) Pte Ltd |
| 9. | HDB Construction Safety Award for Chip Eng Seng Contractors (1988) Pte Ltd (Sengkang N4C39 & 40) |
| 10. | HDB Construction Safety Award for Chip Eng Seng Contractors (1988) Pte Ltd (Tampines N8C31) |

*4 of our projects are Winners for WSHC Workplace Safety and Health **SHARP Award**.*

**Wellbeing of Foreign Workers**

In Singapore, it is standard industry practice to supplement the local construction workforce with foreign contract workers, and the MOM strictly regulates hiring foreign construction workers. Furthermore, all foreign construction workers must attend the mandatory Construction Safety Orientation Course or the Apply Workplace Safety and Health in Construction Sites training.

At end of 2024, the Singapore business operations employed 832 (2023: 884) foreign construction workers from countries approved by the MOM, while 85 (2023: 86) foreign construction workers were employed at the precast factory in Senai, Malaysia.

We have implemented measures to protect foreign construction workers human rights during the hiring process, and at work on our project sites and factories. We provide clean housing facilities in approved dormitories fitted with modern amenities. The facilities and services at the dormitories include dedicated cooking areas, laundry and recreational facilities such as gyms and outdoor games courts, and televisions in the canteen. They also have free wireless internet access. We provide transport facilities for our workers to travel between their residence and the construction site. The work sites also have spaces for parking bicycles.

To demonstrate our appreciation to workers who perform exceptionally well in their works, every month we offer monetary rewards and a certificate of recognition to these workers.

# Quality and Safety

We are committed to upholding the highest standards of quality in construction. We are immensely proud of our strong reputation for high quality and safety standards at our construction sites and factories – a reputation that we have built and strengthened over decades. To achieve these high standards, we regularly invest in the most advanced and efficient construction technologies available, and we continuously maintain or upgrade our equipment to enhance safety, performance and productivity.

Timeliness and precision planning are also key priorities for us, and we have maintained a track record of completing all our projects ahead of schedule or within the target timeline.

**Quality and Safety Standards**
We demonstrate our commitment to quality by achieving ISO 9001:2015 certification for quality management system.

We build our projects in strict compliance with building regulations and standards, including but not limited to structural stability, materials, workmanship and safety. We employ qualified and experienced teams of architects, engineers and technical staff to ensure that each project meets our stringent norms of quality and safety.

Public housing forms a substantial component of our construction business. Delivering high-quality homes is a crucial goal of our building construction segment and we understand the importance of ensuring high-quality workmanship for customers who invest in our homes.

We have a robust defect management response policy which dictates that any necessary rectification is carried out in a timely manner after joint inspections. Our home-buying customers in the rare event that they are not satisfied with a certain aspect of their purchase, home-buyer can submit a complaint within the defects liability period.

During the year, our building construction's entities received the following awards from HDB.

| **Company (Project name)** |
|---|
| HDB Certificate of Merit (Construction) Award for Chip Seng Seng Contractors (1988) Pte Ltd (Tampines GreenSpring) |
| HDB Construction Resilience Recognition Award for CES Engineering & Construction Pte. Ltd. (Marsiling Grove) |

**CONQUAS Score**
The BCA Construction Quality Assessment System (CONQUAS) scheme serves as a national standard for assessing the quality of building projects in Singapore. Our target is to achieve an average scores of 95 and above or highest CONQUAS rating for all our completed projects.

In 2024, our public housing project at Tampines N8C31 (Tampines GreenSpring) has achieved CONQUAS Star rating. Three others public housing project at Woodlands N1 C25 (Marsiling Grove), Bidadari C8 & C9 (Woodleigh Glen) and Sengkang N4 C39/40 (Fernvale Dew) achieved between 93.9 and 94.7 CONQUAS score. While, one private mixed development project Parc Komo achieved 92.8 CONQUAS score.

**Safety for our Sub-Contractors and Suppliers**
Our supply chain mainly comprises contractors and sub-contractors and vendors for building materials and supplies. We regularly engage with our sub-contractors to promote safe work practices through meetings, reviews, training and briefing sessions to help them achieve the required quality, health and safety ("QHS") standards.

Our QHS policies cover our sub-contractors to ensure safety and compliance at our construction sites. We use a supplier evaluation survey to assess their credentials, including their safety competence, and we review their QHS performance every six months. We have also instituted annual awards to recognise subcontractors for their QHS excellence. All of our subcontractors are certified to bizSAFE Level 3 or above.

**Chip Eng Seng Construction Group**

An overview of our people performance in Chip Eng Seng Construction Group is presented below.

| Chip Eng Seng Construction Group | 2022 | 2023 | 2024 |
|---|---|---|---|
| Number of employees | 698 | 725 | 807 |
| Women employees (%) | 28% | 27% | 26% |
| Age based diversity (%): | | | |
| Under 30 years | 14% | 9% | 9% |
| 30 - 50 years | 63% | 65% | 65% |
| Over 50 years | 23% | 26% | 26% |
| Average training hours per employee | 8.5 | 7.4 | 11.6 |
| Male (hours) | 9.1 | 9.1 | 12.7 |
| Female (hours) | 6.8 | 3.2 | 8.3 |
| New hiring (%, number) | 39%, 257 | 25%, 178 | 28%, 218 |
| Male (%, number) | 38%, 182 | 24%, 119 | 28%, 161 |
| Female (%, number) | 42%, 75 | 29%, 59 | 28%, 57 |
| Employee turnover (%, number) | 24.4%, 160 | 20.7%, 146 | 19.4%, 149 |
| Male (%, number) | 27%, 128 | 18%, 89 | 17%, 98 |
| Female (%, number) | 18%, 32 | 28%, 57 | 25%, 51 |
| Employee turnover by age: | | | |
| Under 30 years (%, number) | 45%, 41 | 26%, 21 | 34%, 22 |
| 30 - 50 years (%, number) | 22%, 89 | 21%, 95 | 19%, 96 |
| Over 50 years (%, number) | 18%, 30 | 17%, 30 | 15%, 31 |

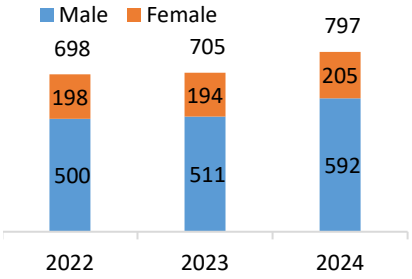
$$\text{Employee hire rate} = \frac{\text{Total number of new hire}}{\text{Average number of employee}}$$

$$\text{Employee turnover rate} = \frac{\text{Total number of resigned employees}}{\text{Average number of employee}}$$

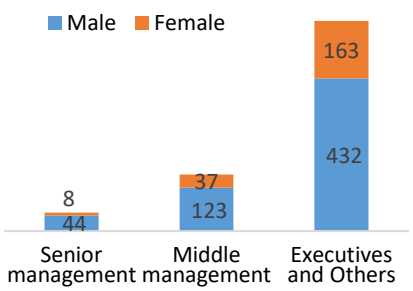
$$\text{Average training hours per employee} = \frac{\text{Total number of training hours provided to employees}}{\text{Average number of employees}}$$

## Group-Wide People Performance

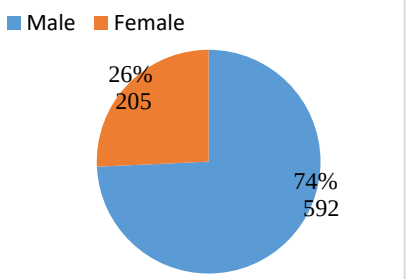
Permanent Employee (on non-term contracts)



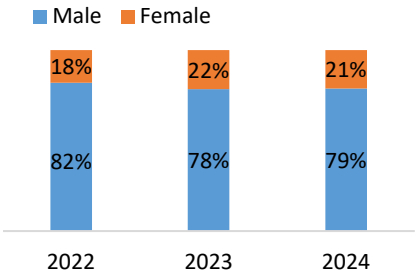

Employees by Category - 2024



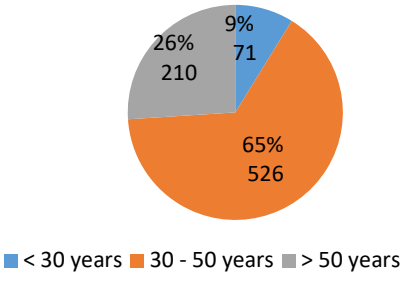

Gender Diversity (Full-Time Employees) - 2024



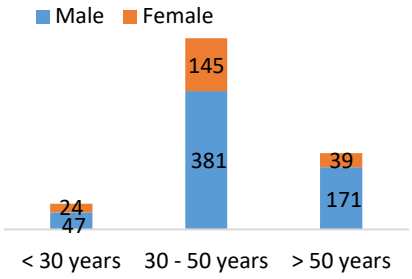

Gender Diversity of Supervisior and Managers



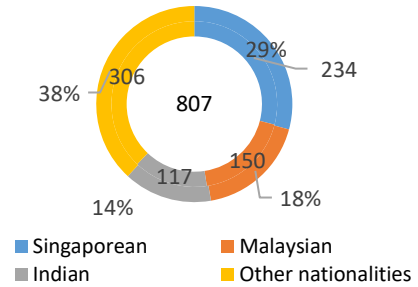

Employees by Age Group - 2024



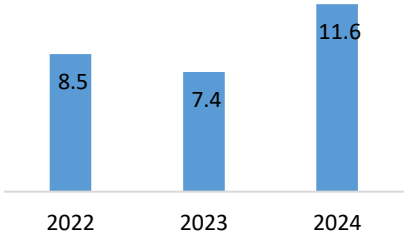

Number of Employees by Age and Gender - 2024



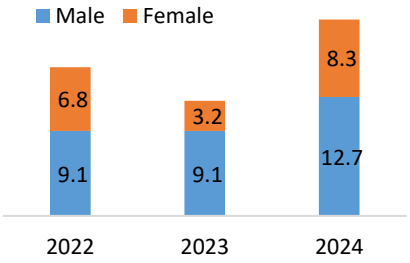

Employees by Nationality - 2024



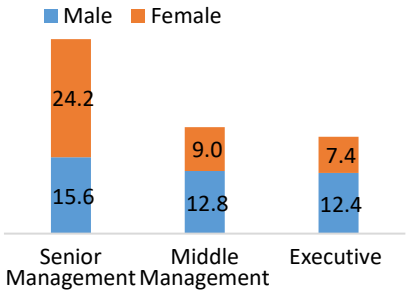

Average Training Hours per Employee



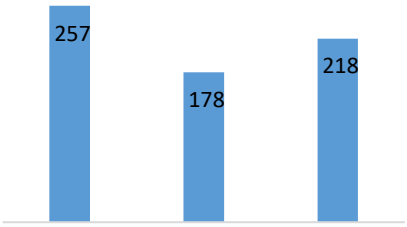

Average Training Hours by Gender



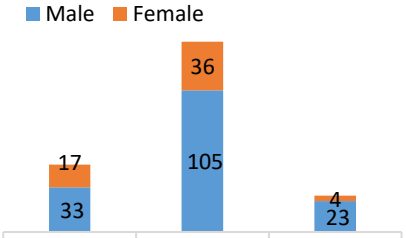

Average Training Hours by Employment Category - 2024



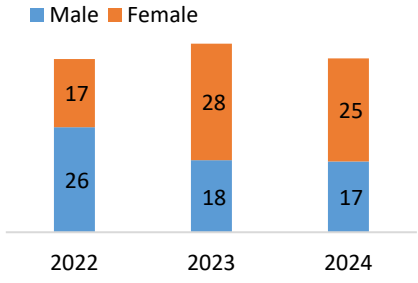

New Hiring



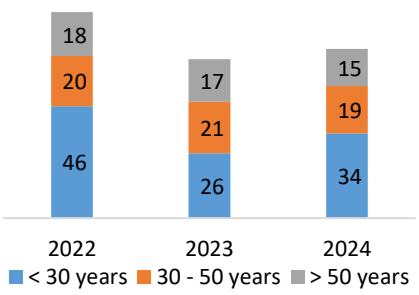

New Hire by Age and Gender - 2024



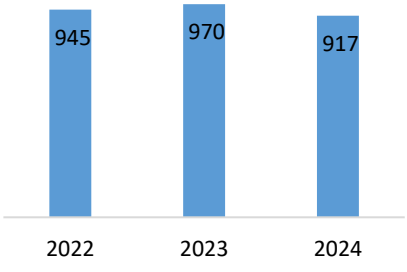

Employee Turnover Rate by Gender (%)




Employee Turnover Rate by Age Group (%)




Foreign Construction Workers



# Community

**Giving back to local communities**

As an international business engaged in diverse construction and engineering businesses, we have the potential to make significant contributions to our local communities. We support social causes, the education, healthcare, and the environment through our community outreach, and we work together with Singapore's construction community and non-profit organisations to support multiple philanthropic programmes through giving and fundraising efforts.

Not only are we able to give back to our communities through our corporate social responsible activities, but our community outreach also helps us forge a stronger bond with and among our employees, customers, and beneficiaries.

Since 2022, the Group has collaborated with It's Raining Raincoats (IRR), a Singapore-based charity organization that aims to improve the lives of migrant workers by building bridges between migrant workers and residents of Singapore. One of IRR's initiatives is Makan with Migrant Workers program. This program is designed for individuals (and their families) to foster bonds on a personal level with the migrant workers' community in Singapore. The Group has been actively promoting this program to all employees to participate.

**Recognising and Nurturing Future Talent**

During 2024, we provided internship opportunities for 4 (2023: 21) undergraduates. Three (3) undergraduates were from 2 universities in Singapore and one from an oversea university. These interns spent a total of 30 weeks (2023: 399 weeks) with the Group. The internship periods ranged between 2 weeks and 12 weeks (2023: between 12 weeks and 30 weeks). These interns are assigned to various departments and project sites to gain practical engineering and construction experience.

**Supporting Communities**

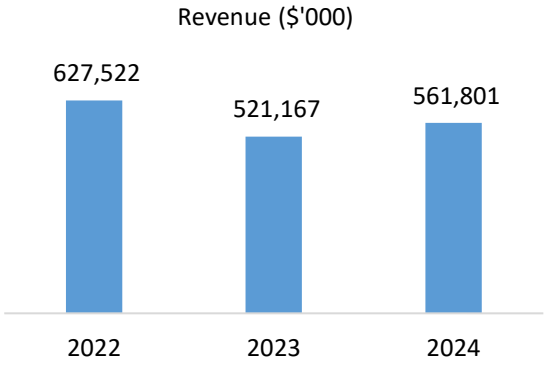
In 2024, the Group donated total of $35,000 to support events for the following organisations:

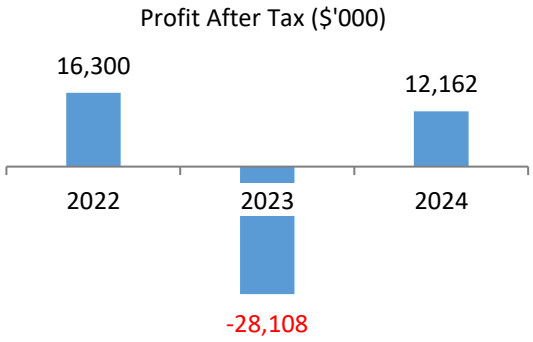
1. Kwong Wai Shui Hospital
2. The Singapore Scout Association – Scout Job Week 2024
3. Nee Soon South CCBF
4. Singapore National Eye Centre Pte Ltd
5. Ren Ci Vegetarian Food Fiesta 2024
6. UOB Gold Challenge in Shanghai
7. Building Construction and Timber Industries Employees' Union, Branch Activity
8. Singapore Centre for 3D Printing - 10$^{th}$ Anniversary

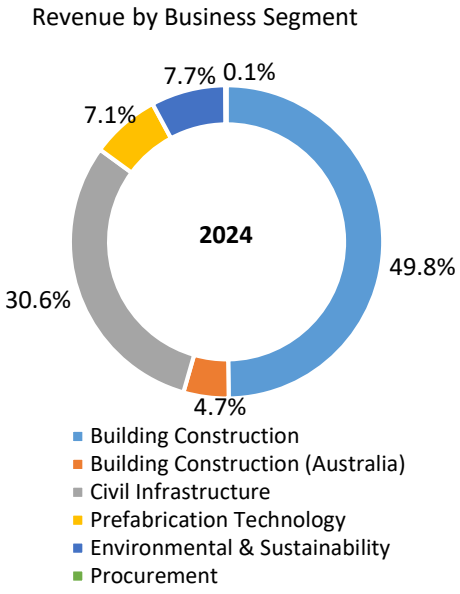
# Economic Performance

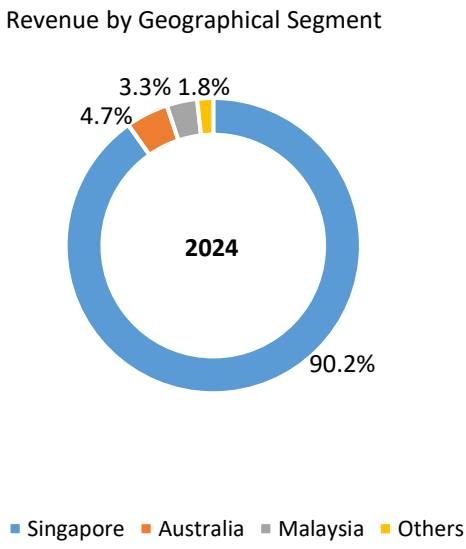
Chip Eng Seng Construction is committed to long-term value creation for our shareholders and stakeholders through the pursuit of sustainability business growth strategies. Our economic performance is as follows:

| **Economic Performance ($'000)** | | | |
|---|---|---|---|
| **Revenue by business segment** | **2022** | **2023** | **2024** |
| Building Construction | 356,261 | 251,143 | 279,668 |
| Building Construction (Australia) | 0 | 0 | 26,207 |
| Civil Infrastructure | 191,455 | 197,877 | 171,818 |
| Prefabrication Technology | 29,407 | 22,322 | 40,096 |
| Environmental & Sustainability | 50,399 | 48,980 | 43,270 |
| Procurement | 0 | 845 | 742 |
| **Total Revenue** | **627,522** | **521,167** | **561,801** |
| Profit/(Loss) after tax | 16,300 | (28,108) | 12,162 |
| Employee wages and benefits (including directors) | 76,675 | 84,468 | 89,207 |
| Income taxes paid/(received) | 2,435 | 2,018 | (470) |
| Interest to bank/financial institution | 2,328 | 2,951 | 1,628 |
| Dividends to shareholders | 0 | 26,672 | 0 |
| Community investment | 10 | 7 | 35 |
| Grant/Financial assistant from government | 2,404 | 0 | 832 |



# Supplementary – Environmental Performance

We recognised that intensity performance of our environmental material factors can be measured and computed by output/activities other than by revenue. Hence, for the benefit of users and stakeholders we are pleased to disclose the following performance to enable greater analysis.

| **Energy consumption intensity by business segments :** | **2022** | **2023** | **2024** |
|---|---|---|---|
| Building Construction (GJ per $m^2$ of CFA#) | 0.3 | 0.3 | 0.3 |
| Prefabrication Technology (GJ per $m^3$ of production) | 0.1 | 0.2 | 0.2 |
| Corporate Function (GJ per $m^2$ of floor area) | 0.2 | 0.3 | 0.8 |

| **GHG emissions intensity by business segments :** | **2022** | **2023** | **2024** |
|---|---|---|---|
| Building Construction ($kgCO_2e$ per $m^2$ of CFA#) | 21.9 | 22.4 | 24.2 |
| Prefabrication Technology ($kgCO_2e$ per $m^3$ of production volume) | 9.2 | 13.9 | 12.9 |
| Corporate Function ($kgCO_2e$ per $m^2$ of floor area) | 26.0 | 30.9 | 77.0 |

| **Water withdrawal intensity by business segments :** | **2022** | **2023** | **2024** |
|---|---|---|---|
| Building Construction ($m^3$ per $m^2$ of CFA#) | 0.8 | 0.9 | 0.9 |
| Prefabrication Technology ($m^3$ per $m^3$ of production volume) | 0.8 | 1.0 | 0.7 |
| Corporate Function ($m^3$ per $m^2$ of floor area) | 0.0 | 0.0 | 0.1 |

| **Waste generation intensity by business segments :** | **2022** | **2023** | **2024** |
|---|---|---|---|
| Building Construction (kg per $m^2$ of CFA#) | 21.6 | 31.7 | 36.8 |
| Prefabrication Technology (kg per $m^3$ of production volume) | 2.9 | 7.0 | 5.8 |

# Construction floor area
The intensity performances for energy, GHG emissions, water and waste at Building Construction segment are for projects at Tampines Neighbourhood 8 Contract 31, Pasir Ris Neighbourhood 5 Contract 26 & 27, Hougang Neighbourhood 2 Contract 11, Tengah Brickland Contract 2 and Uln Pandan Contract 1 & 2.

Note:
Significant increased in energy, GHG emissions and water withdrawal intensity at Corporate Function from year 2023 to year 2024 was due mainly to moving from a smaller office to larger and spacious office to align with business and operation needs.

# SASB Engineering & Construction Services Sector Disclosure

Chip Eng Seng Construction supports the Sustainability Accounting Standards Board (SASB) Standards by Value Reporting Foundation. It helps the Group to communicate with businesses and investors on the financial impacts of sustainability by focusing on material sustainability information. The tables below reference the Standard for Engineering & Construction Sector as defined by SASB's Sustainability Industry Classification System and identifies how the Group has addressed the SASB Accounting Metric and Activity Metric for the scope of the Group operations in Singapore and overseas.

| Topic | SASB Code | Accounting Metric | 2024 | 2023 |
|---|---|---|---|---|
| **Environmental Impacts of Project Development** | IF-EN-160a.1 | Number of incidents of non-compliance with environmental permits, standards, and regulations | 1 | 0 |
| | IF-EN-160a.2 | Discussion of processes to assess and manage environmental risks associated with project design, siting, and construction | Page 22 - 27 | Page 22 - 27 |
| **Structural Integrity & Safety** | IF-EN-250a.1 | Amount of defect- and safety-related rework costs | $0 | $0 |
| | IF-EN-250a.2 | Total amount of monetary losses as a result of legal proceedings associated with defect- and safety-related incidents | $0 | $0 |
| **Workforce Health & Safety** | IF-EN-320a.1 | (1) Total recordable incident rate (TRIR):<br>(a) direct employees and<br>(b) contract employees<br>and<br>2) Fatality rate:<br>(a) direct employees and<br>(b) contract employees | 0.28<br>0.02<br>0.26<br><br>0.02<br>0.00<br>0.02 | 0.09<br>0.00<br>0.09<br><br>0.00<br>0.00<br>0.00 |
| **Lifecycle Impacts of Buildings & Infrastructure** | IF-EN-410a.1 | Number of (1) commissioned projects certified to a third-party multi-attribute sustainability standard and<br>(2) active projects seeking such certification | 0<br><br>0 | 0<br><br>0 |
| | IF-EN-410a.2 | Discussion of process to incorporate operational-phase energy and water efficiency considerations into project planning and design | Page 22 - 27 | Page 22 - 27 |
| **Climate Impacts of Business Mix** | IF-EN-410b.1 | Amount of backlog for (1) hydrocarbon-related projects and (2) renewable energy projects | $0 | $0 |
| | IF-EN-410b.2 | Amount of backlog cancellations associated with hydrocarbon-related projects | $0 | $0 |
| | IF-EN-410b.3 | Amount of backlog for non-energy projects associated with climate change mitigation | $0 | $0 |
| **Business Ethics** | IF-EN-510a.1 | (1) Number of active projects and<br>(2) backlog in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index | 0<br>0 | 0<br>0 |
| | IF-EN-510a.2 | Total amount of monetary losses as a result of legal proceedings associated with charges of<br>(1) bribery or corruption and<br>(2) anti-competitive practices | <br>$0<br>$0 | <br>$0<br>$0 |
| | IF-EN-510a.3 | Description of policies and practices for prevention of (1) bribery and corruption, and (2) anti-competitive behaviour in the project bidding processes | Page 10 | Page 10 |

| Activity Metric | SASB Code | 2024 | 2023 |
|---|---|---|---|
| Number of active projects | IF-EN-000.A | 9 | 10 |
| Number of commissioned projects | IF-EN-000.B | 2 | 0 |
| Total backlog | IF-EN-000.C | $2.2 billion | $2.4 billion |

# GRI Content Index

| | |
|---|---|
| **Statement of Use** | **Chip Eng Seng Construction Pte. Ltd.** has reported in accordance with the GRI Standards for the period 1st January 2024 to 31st December 2024. |
| **GRI 1 Used** | GRI 1: Foundation 2021. |
| **Applicable GRI Sector Standard(s)** | Not applicable as a GRI sector standard is not available for our industry. |

| GRI Standard | Disclosures | Page No. |
|---|---|---|
| **GRI 2: General Disclosures 2021** | | |
| **Organization Details and Reporting Practices** | | |
| GRI 2-1 | Organizational details | 3, 4 |
| GRI 2-2 | Entities included in the organization's sustainability reporting | 3, 4 |
| GRI 2-3 | Reporting period, frequency and contact point | 5 |
| GRI 2-4 | Restatements of information | 5 |
| GRI 2-5 | External assurance | 5 |
| **Activities and Workers** | | |
| GRI 2-6 | Activities, value chain and other business relationships | 15, 16 |
| GRI 2-7 | Employees | 39 – 41, 47, 47 |
| GRI 2-8 | Workers who are not employees | |
| **Governance** | | |
| GRI 2-9 | Governance structure and composition | 8, AR 2021, page 91-93, 94 |
| GRI 2-10 | Nomination and selection of the highest governance body | AR 2021, page 95 - 97 |
| GRI 2-11 | Chair of the highest governance body | 8, AR 2021, page 91 |
| GRI 2-12 | Role of the highest governance body in overseeing the management of impacts | 8, AR 2021, page 91 |
| GRI 2-13 | Delegation of responsibility for managing impacts | 8, AR 2021, page 91 |
| GRI 2-14 | Role of the highest governance body in sustainability reporting | 8 |
| GRI 2-15 | Conflicts of interest | not applicable |
| GRI 2-16 | Communication of critical concerns | AR 2021, page 123 |
| GRI 2-17 | Collective knowledge of the highest governance body | AR 2021, page 89 |
| GRI 2-18 | Evaluation of the performance of the highest governance body | AR 2021, page 108 |
| GRI 2-19 | Remuneration policies | AR 2021, page 108, 109 |
| GRI 2-20 | Process to determine remuneration | AR 2021, page 108, 109 |
| GRI 2-21 | Annual total compensation ratio | AR 2021, page 110, 111 |
| **Strategies, Policies and Practices** | | |
| GRI 2-22 | Statement on sustainable development strategy | 9 – 11 |
| GRI 2-23 | Policy commitments | 9 – 11 |
| GRI 2-24 | Embedding policy commitments | 9 – 11 |
| GRI 2-25 | Processes to remediate negative impacts | AR 2021, page 102 |
| GRI 2-26 | Mechanisms for seeking advice and raising concerns | AR 2021, page 102 |
| GRI 2-27 | Compliance with laws and regulations | 9 – 11 |
| GRI 2-28 | Membership associations | 18 |
| **Stakeholder Engagement** | | |
| GRI 2-29 | Approach to stakeholder engagement | 19 – 20 |
| GRI 2-30 | Collective bargaining agreements | 10 |
| **Material Topics** | | |
| GRI 3-1 | Process to determine material topics | 19 |
| GRI 3-2 | List of material topics | 19 - 20 |
| **Economic Topics** | | |
| **Economic Performance** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 49 |
| GRI 201: Economic Performance | 201-1 Direct economic value generated and distributed | 49 |
| **Anti-corruption** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 10 |
| GRI 205: Anti-corruption 2016 | 205-2 Communication and training about anti-corruption policies and procedures | 10 |

| GRI Standard | Disclosures | Page No. |
|---|---|---|
| **GRI 2: General Disclosures 2021** | | |
| | 205-3 Confirmed incidents of corruption and actions taken | 10 |
| **Anti-competition** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 10 |
| GRI 206: Anti-competitive Behaviour 2016 | 206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices | 10 |
| **Tax Compliance** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 10 |
| GRI 207: Tax Compliance 2019 | 207-1 Approach to tax | 10 |
| | 207-2 Tax governance, control, and risk management | 10 |
| | 207-3 Stakeholder engagement and management of concerns related to tax | 10 |
| **Environmental Topics** | | |
| **Energy** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 25 |
| GRI 302: Energy 2016 | 302-1 Energy consumption within the organization | 25 |
| | 302-3 Energy intensity | 22, 25 |
| **Water** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 27 |
| Management Approach Disclosures 2018 | 303-1 Interactions with water as a shared resource | 27 |
| | 303-2 Management of water discharge-related impacts | 27 |
| GRI 303: Water and Effluents 2018 | 303-3 Water withdrawal | 22, 27 |
| **Emissions** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 25 |
| GRI 305: Emissions 2016 | 305-1 Direct (Scope 1) GHG emissions | 22, 25 |
| | 305-2 Energy indirect (Scope 2) GHG emissions | 22, 25 |
| | 305-4 GHG emission intensity | 22, 25 |
| | 306-5 Reduction of GHG emissions | 22 |
| **Waste** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 26 |
| Management Approach Disclosures 2020 | 306-1 Waste generation and significant waste-related impacts | 26 |
| | 306-2 Management of significant waste-related impacts | 26 |
| GRI 306: Waste 2020 | 306-3 Waste generated | 26 |
| **Social Topics** | | |
| **Employment** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 40 |
| GRI 401: Employment 2016 | 401-1 New Employee hires and employee turnover | 46 |
| | 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees | 46 |
| **Occupational Health and Safety** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 41 – 44 |
| Management Approach Disclosures 2018 | 403-1 Occupational health and safety management system | 41 – 44 |
| | 403-2 Hazard identification, risk assessment, and incident investigation | 41 – 44 |
| | 403-3 Occupational health services | 41 – 44 |
| | 403-4 Worker participation, consultation, and communication on occupational health and safety | 41 – 44 |
| | 403-5 Worker training on occupational health and safety | 41 – 44 |
| | 403-6 Promotion of worker health | 41 – 44 |
| | 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | 41 – 44 |
| GRI 403: Occupational Health and Safety 2018 | 403-8 Workers covered by an occupational health and safety management system | 41 – 44 |
| | 403-9 Work-related injuries | 41 – 44 |

| | | |
|---|---|---|
| **Training and Education** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 40 |
| GRI 404: Training and Education 2016 | 404-1 Average hours of training per year per employee | 40 |
| | 404-3 Percentage of employees receiving regular performance and career development reviews | 40 |
| **Diversity and Equal Opportunities** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 39 |
| GRI 405: Diversity and Equal Opportunity 2016 | 405-1 Diversity of governance bodies and employees | 39 |
| **Non-Discrimination** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 10 |
| GRI 406: Non-discrimination 2016 | 406-1 Incidents of discrimination and corrective actions taken | 10 |
| **Freedom of Association and Collective Bargaining** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 10 |
| GRI 407: Freedom of Association and Collective Bargaining 2016 | 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk | 10 |
| **Child Labour** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 10 - 11 |
| GRI 408: Child Labour 2016 | 408-1 Operations and suppliers at significant risk for incidence of Child Labour | 10 – 11 |
| **Forced, or Compulsory Labour** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 10 – 11 |
| GRI 409: Forced or Compulsory Labour 2016 | 409-1 Operations and suppliers at significant risk for incidence of forced or compulsory labour | 10 – 11 |
| **Local Communities** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 48 |
| GRI 413: Local Communities 2016 | 413-1 Operations with local community engagement, impact assessments, and development programs | 48 |
| **Supply Chain** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 45 |
| GRI 414: Supplier Social Assessment 2016 | 414-1 New suppliers that were screened using social criteria | 45 |
| **Customer Health and Safety** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 45 |
| GRI 416: Customer Health and Safety 2016 | 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services | 45 |
| **Customer Privacy** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | 11 |
| GRI 418: Customer Privacy 2016 | 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data | 11 |

# SASB Index

**Engineering & Construction Services**
Sustainability Accounting Standard

| Topic | SASB Code | Accounting Metric | Page Reference |
|---|---|---|---|
| **Environmental Impacts of Project Development** | IF-EN-160a.1 | Number of incidents of non-compliance with environmental permits, standards, and regulations | 11, 52 |
| | IF-EN-160a.2 | Discussion of processes to assess and manage environmental risks associated with project design, siting, and construction | 22 – 27 |
| **Structural Integrity & Safety** | IF-EN-250a.1 | Amount of defect- and safety-related rework costs | 52 |
| | IF-EN-250a.2 | Total amount of monetary losses as a result of legal proceedings associated with defect- and safety-related incidents | 52 |
| **Workforce Health & Safety** | IF-EN-320a.1 | (1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees | 52 |
| **Lifecycle Impacts of Buildings & Infrastructure** | IF-EN-410a.1 | Number of (1) commissioned projects certified to a third-party multi-attribute sustainability standard and (2) active projects seeking such certification | 52 |
| | IF-EN-410a.2 | Discussion of process to incorporate operational-phase energy and water efficiency considerations into project planning and design | 22 – 27 |
| **Business Ethics** | IF-EN-510a.1 | (1) Number of active projects and (2) backlog in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index | 52 |
| | IF-EN-510a.2 | Total amount of monetary losses as a result of legal proceedings associated with charges of (1) bribery or corruption and (2) anti-competitive practices | 52 |
| | IF-EN-510a.3 | Description of policies and practices for prevention of (1) bribery and corruption, and (2) anti-competitive behaviour in the project bidding processes | 10 |

| Activity Metric | SASB Code | Page Reference |
|---|---|---|
| Number of active projects | IF-EN-000.A | 8, 52 |
| Number of commissioned projects | IF-EN-000.B | 8, 52 |
| Total backlog | IF-EN-000.C | 52 |

# TCFD Disclosures

| Code | TCFD Recommendations | Page no. |
|---|---|---|
| **Governance** | | |
| TCDF 1(a) | Describe the board's oversight of climate-related risks and opportunities. | 35 |
| TCFD 1(b) | Describe management's role in assessing and managing climate-related risks and opportunities. | 35 |
| **Strategy** | | |
| TCFD 2(a) | Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term. | 37 – 38 |
| TCFD 2(b) | Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning. | 37 – 38 |
| TCFD 2(c) | Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. | 37 - 38 |
| **Risk Management** | | |
| TCFD 3(a) | Describe the organisation's processes for identifying and assessing climate-related risks. | 37 – 38 |
| TCFD 3(b) | Describe the organisation's processes for managing climate-related risks. | 37 - 38 |
| TCFD 3(c) | Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management. | 37 – 38 |
| **Metrics and Targets** | | |
| TCFD 4(a) | Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process. | 21 - 22 |
| TCFD 4(b) | Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks. | 22, 25 |
| TCFD 4(c) | Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets. | 21 |